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Reports

— State of Colorado —

— of the —

State Engineer

(J. P. MAXWELL)

— for —

1891, 1892

SIXTH BIENNIAL REPORT

OF THE

STATE ENGINEER

TO THE

Governor of Colorado

FOR THE

YEARS 1891 AND 1892



DENVER, COLORADO:
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1892

1891-1892



LETTER OF TRANSMITTAL.

DENVER, COLO., Dec. 1, 1892.

GOVERNOR :—I have the honor to transmit herewith the report of the transactions of the Department of the State Engineer for the fiscal years ending November 30, 1892. I am, sir, very respectfully,

Your obedient servant,

J. P. MAXWELL,
State Engineer.

TO HIS EXCELLENCY,

JOHN L. ROUTT,

Governor of Colorado.



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INTRODUCTION.

In presenting the Sixth Biennial Report of the State Engineer to the public it is gratifying to be able to state that the duties of the office have been performed under much more favorable auspices than during the two preceding years. This is largely due to the more generous volume of our streams, supplemented by opportune rains, but in no small degree to the more efficient use of water and the increased facilities for its storage. While different localities have at times experienced a deficiency in supply, with a resultant shrinkage in crops, as a rule the streams have responded to the demands made upon them during the growing season without serious drawbacks, and a healthy tone has been given to irrigation and its accompanying interests not known for several years.

The rainfall during the season of 1891 was from twenty to fifty per cent., according to locality, greater than the average for several years, and the flow of the streams during the irrigating season was increased in like proportion. While in 1892 the precipitation has been somewhat less on the valleys, the streams have generally carried a volume equal to that of 1891, as a result of greater snowfall on the ranges, and more or less from the precipitation in the mountains during the previous year.

The marked improvement in the water supply has materially reduced the number of vexatious disputes in the allotments of water, the settlement of which has

heretofore occupied much of the time of the State Engineer, and has relieved him of the necessity of giving that close attention to the distribution formerly required.

Several causes of contention have also been removed by their determination in the Supreme Court of the State, such as "the status of priorities on a natural stream with reference to its tributaries," "the right to water for domestic use under the Constitution," "property rights in water," "the rights to transfer," etc., mention of which will be found in a subsequent part of this report.

As a consequence, the State Engineer has been able to give that closer attention to the various internal improvements provided for by the Eighth General Assembly which their magnitude and importance demanded.

Appropriations were made by the last General Assembly from the internal improvement and income funds amounting in the aggregate to \$223,000.00 for the construction of state roads, bridges and reservoirs in different and generally remote parts of the State; and while a Board of Construction was provided in each case, of which the Governor and State Engineer were members, the examination of the grounds, location of sites, preparation of plans, specifications and contracts, and the general supervision of the works naturally devolved upon the latter official. In the expenditure of this large sum of money it was, of course, contemplated that the best interests of the State and the several localities would be jointly consulted. This could only be done by devoting such time to the preliminary examination and surveys of routes, sites and locations as would result in securing those most favorable for the purposes intended, within the limits prescribed, due consideration being given to economy in construction.

A detailed account of this stewardship will be found in an appendix to this report.

As required by law, the State Engineer has also given attention and services to matters connected with the other departments of State whenever called upon by the Governor so to do, notably in the laying off and platting of a townsite on school lands at Creede, in the examination of canals constructed for the supply of

water to State lands, in the examination of grounds for Mesa County State canal, and in the general supervision of State Canal No. 1, at Canon City.

The establishment of indefinite and uncertain county boundaries has also demanded more or less attention, under the law of 1887, this duty devolving upon the State Engineer in connection with the County Surveyors of interested counties.

From the above summary of the various requirements made upon this office by the more recent enactments of the Legislature, it will be come apparent that the original scope designed for the "State Hydraulic Engineer" has become so extended and diversified that the hydraulic department is, to a certain extent, made incidental and subordinate to the special duties imposed, and that but little time is given for a personal inspection of the different water districts and irrigation projects, or for a systematic study of the important questions connected with the supply, conservation and economical uses of the waters of the State.

Adjudications of water rights have taken place since the last report in the second, third and fifth water divisions, embracing a number of water districts. The importance of these decrees and the information therein contained renders their publication in concise and tabulated form a matter of general interest and of special importance to the several localities.

They will be found under the headings of their respective districts.

CHAPTER I.

INSTRUCTIONS.

During the early part of the season of 1891 the water supply in the streams of the State met the demands made upon it very generally, and little friction was encountered in the administration of the department. On some of the smaller streams, however, whose heads do not reach back into the ranges of snow supply, a shortage was experienced, and the ever-recurring question of water for domestic use was raised by numerous letters of inquiry. An impression prevailed that a recent enactment of the Legislature gave a preference right for this purpose in times of scarcity as against older claims for irrigation. Many applications were also made by Water Commissioners in remote districts for the rating of ditches, it being claimed that flumes had been constructed in compliance with instructions, and it being assumed that such measurements were to be made at the expense of the State. Unfortunately, however, the law does not contemplate such measurements by this department except at the expense of the owners of ditches, and the owners are generally unwilling to incur any considerable expense of this kind, especially when the benefit inures principally to the Water Commissioner in facilitating the distribution of water.

It has been the practice to furnish an assistant for this purpose whenever the parties in interest were willing to pay the traveling expenses, and the Water Commissioners have been instructed to secure the construction of as many measuring flumes as practicable in one locality, and then urge a pooling among the owners to lighten the expense per ditch, but indifferent success has been met with.

In a large majority of cases throughout the State the distribution of water to ditches is a matter of guess work, and how wide they come of the mark may be seen from some of the Commissioners' reports, wherein it is shown that the ditches have carried during the irrigating season several times the greatest volume of the streams from which the waters are taken.

It is my conviction that a far more equitable distribution of water would be obtained, and the interests of irrigation better subserved, if the work of rating all ditches whose rights have been adjudicated was made a duty of this department, and the expense thereof borne entirely by the State, and especially is this the case where, under the present system of appointments, Water Commissioners are selected without regard to that technical knowledge necessary to insure any degree of accuracy in the work of measuring water. The Commissioners may possess general intelligence and honesty of purpose, but these alone will not suffice, and unless they are well versed in the higher mathematics, the intricate formula furnished them by this department for estimating the velocity and volume of flowing water will be as full of mysteries and surprises as a bucking broncho will develop in the tenderfoot who attempts to elucidate his motions while on his back. It is not every man of good horse sense who can ride a cavorting broncho, and the more horse sense he has the less he will care to. Nor can it be expected that a person who has spent his life in "whacking bulls," or engaged in some other exclusively manual pursuit, will take Kutter's formula

$$V = \left(\frac{1.811}{n} - 41.6 - \frac{.00281}{s} \right) \div \left(1 - \left(41.6 - \frac{.00281}{s} \right) \times \frac{n}{V^r} \right) \times V^r s,$$

determine therefrom the coefficient of mean velocity, ratio of fall to distance, area of cross section, wetted perimter, hydraulic mean depth, then guess at the coefficient of roughness, extract the square root of one factor and raise another to the powers that be, and evolve from this labyrinth of Greek literature the velocity of water per second—at least without indulging in a degree of profanity that should not be encouraged.

With well constructed measuring flumes, having proper ratings indicated thereon, an intimate acquaintance with Mr. Kutter will not be necessary to secure an equitable distribution of water. There is little benefit

to be derived, however, from an enforcement of the law requiring such flumes to be constructed by the owners of ditches unless the further work of rating is done to enable the Water Commissioners to determine the quantity carried for a given depth of water.

In reply to the inquiries and applications above indicated and for other purposes the following circular letter was issued :

Letter of instructions to Superintendents of Irrigation and Water Commissioners :

ISSUED FROM THE STATE ENGINEER'S OFFICE, }
DENVER, COLO., July 1, 1891. }

GENTLEMEN—Following will be found for your information an Act in relation to "Water for Domestic Purposes," passed by the Eighth General Assembly :

"SECTION 1. Water claimed and appropriated for domestic purposes shall not be employed or used for irrigation or for application to land or plants in any manner to any extent whatever ; *Provided*, That the provisions of this section shall not prohibit any citizen or town or corporation, organized solely for the purpose of supplying water to the inhabitants of such city or town, from supplying water thereto for sprinkling streets and extinguishing fires or for household purposes.

"SEC. 2. Any person claiming the right to divert water for domestic purposes from any natural stream who shall apply or knowingly permit the water so diverted to be applied for other than domestic purposes, to the injury of any other person entitled to use such water for irrigation, shall be deemed guilty of a misdemeanor, and, upon conviction, shall pay a fine of not less than \$50 and not exceeding \$200, in the discretion of the Court wherein conviction is had. Each day of such improper application of water obtained in the manner aforesaid shall be deemed a separate offense. Justices of the Peace in their several precincts shall have jurisdiction of the aforesaid offense, subject to the right of appeal, as in cases of assault and battery."

There being no statutory provisions governing the distribution of water for domestic purposes, it will not be permitted to carry water in ditches exclusively for such purposes, outside of the order of priorities as established by judicial decrees for irrigation, where such carriage will injuriously affect parties having older rights for irrigation, unless a special order of the Court is obtained for such diversion. Further than the above no laws were enacted by the Eighth General Assembly pertaining to irrigation or affecting the duties of the officers of this Department.

The very limited assistants' fund provided for this Department by the last General Assembly will render it impracticable to do any rating of ditches where traveling expenses are involved, except as such expenses are paid by the owners of ditches to be rated.

Water Commissioners will therefore be compelled to exercise their best judgment in the measurement and distribution of water to ditches under decrees until such time as a fund can be provided for proper ratings.

It is especially desired that Water Commissioners in the exercise of their duties will collect from all available sources as complete and accurate data as possible relative to the number of acres of land that can be irrigated from each ditch, the number of acres in each of alfalfa, seeded grasses, natural grasses and fruit trees; also, the acreage in all other crops combined. The information thus obtained will be published in the report from this Department, and will be of value to each County, as showing the variety and extent of productions therein.

Blanks will be furnished to Water Commissioners on application to the State Engineer for the collection of information regarding existing reservoirs and reservoir sites—a sample of which will accompany this circular—and, where lands are irrigated by stored waters, it is important to know the number of acres under each reservoir.

In artesian well districts blanks will also be furnished for statements in relation thereto.

Water Commissioners having copies of the Fourth Biennial Report from this office will carefully preserve the same, as the supply is entirely exhausted, and many of the laws relative to their duties and other information of especial importance in the discharge of their duties are therein contained.

Each Water Commissioner will make a statistical report to the Superintendent of Irrigation of the division embracing his district at the close of each irrigation season, and will accompany the same with a full account of his labors during such season.

In all matters not herein mentioned you will be governed by the instructions heretofore given and embraced in the reports from this office.

J. P. MAXWELL.
State Engineer.

WATER COMMISSIONERS.

This Department has sought to obtain through the Water Commissioners such statistical information relative to irrigation and acreage of crops as would be of value to the several sections and the State at large in showing up the agricultural resources and the advancement made therein each year. It would seem that such statistics could be obtained by the Commissioners while engaged in their routine duties without serious inroads upon their time. A general apathy on the subject, however, prevails in many of the districts. This is manifested in some localities by a disinclination on the part of the County Commissioners to allow for the time necessary to collect such data and make report thereon, in others to a refusal of the Superintendents of ditches to give the information sought, and not a few Water Commissioners are reported by the Superintendents of the divisions as derelict in making any reports whatever. The reports from some of the divisions are therefore very incomplete.

This suggests that the method of appointing these officers, and the conditions attending their tenure of office, are subject to serious criticism.

The appointments are made by the Governor upon recommendations of the County Commissioners of one or more of the Counties embraced in the water district. The Governor has no definite information as to the qualification of the parties recommended and no discretion in the matter, except to refuse to make the appointment or remove for cause after the appointments are made. This department is not advised in the matter until the bond of the appointee is transmitted for approval, and in some instances no bonds are presented.

Thus it will be seen that the County Commissioners alone can recommend, but cannot remove for cause, the Governor appoints but cannot designate the party, and the State Engineer, who under the law has supervisory control, has nothing to say in either case, but must take such timber as political and other influences dictate, and accept such services as the appointee sees fit to render. The principal objection to the method arises from the fact that no responsibility for the appointment rests upon any department, and the machinery is so complicated that a removal for incompetency or neglect of duty is practically impossible.

A change of Water Commissioners with each change of administration is also detrimental to the service. An efficient Water Commissioner should be kept in place so long as there is mutual satisfaction. His duties are peculiar, requiring a special knowledge of the flow of water and the streams and ditches of his district, such as will take the two years of service to thoroughly acquire. The first term only qualifies him to fill the position acceptably, and thereafter his proficiency and judgment become of importance to the district.

The method of paying the Commissioners is also open to objection, and renders it difficult to secure and retain competent assistants in some of the districts. The monthly bill for services is apportioned among the several Counties embraced in the district. Some decline or neglect to issue the warrants for various reasons assigned, in other Counties the warrants are at a discount, so that by the time collections are made the officer has earned

his salary a second time, or suffers a serious diminution in the amount due. To insure the retention of an efficient Commissioner his pay should be prompt and for the full amount of an equitable bill. If he is not performing good service there should be some effective means of getting rid of him.

TRANSFERS OF WATER RIGHTS.

In the spring of 1891, the New Mercer Ditch Company filed with the State Engineer a certificate of purchase of the water rights of the Yeager ditch, District No. 3, Larimer County, Colorado, consisting of priorities numbers one and eight for a decreed volume of thirty-three and one-half cubic feet of water per second, diverted from the Cache la Poudre River. This certificate was accompanied by application for an order to the Water Commissioner of said District to permit of the transfer of said quantity of water to the New Mercer ditch upon demand of the parties in interest.

To satisfy the department as to the rights of the Yeager ditch to the thirty-three and one-half cubic feet per second decreed to it, an assistant was dispatched to Fort Collins for the purpose of measuring and determining the carrying capacity of said ditch.

From the measurements taken, and information obtained, it was ascertained that the ditch had never been constructed to carry a flow of water exceeding three and four-tenths cubic feet per second, and that from long disuse and the filling of its channel near the head with sand and *debris*, it was not in condition to permit of the diversion of any quantity of water from the river; furthermore, that the ditch did not exceed one mile in length nor cover more than 120 acres of land, and could not therefore use beneficially its limited capacity.

Upon this finding the application for an order permitting the transfer was denied, whereupon a temporary injunction was obtained from the County Court of Larimer County restraining the Water Commissioner from interfering with the diversion of the thirty-three and one-half cubic feet purchased into the New Mercer ditch.

Hearing was had before Judge Allen of the District Court for Arapahoe County, on a motion to dissolve the injunction, and upon showing of the facts the motion was sustained and the Water Commissioner instructed to shut the disputed appropriations out of the New Mercer ditch.

The above was the first of several applications for the transfer of water rights, in part and as a whole, from one ditch to another following, and based upon the enunciation of that right by the Supreme Court of the State of Colorado in the case of *Strickler vs. Colorado Springs*.

In the syllabus of that opinion two important principles are enunciated and by the decision established :

First. That "a prior appropriator of water from a stream may change the point of diversion and the place of use without losing his priority, provided the rights of others are not injuriously affected by such change."

Second. That "a priority to the use of water for irrigation is a property right, and may be sold and transferred separately from the land in connection with which the right ripened."

The right of sale and transfer to a different point of diversion being settled, it becomes important to know under what regulation it is to be effected, and who is to determine the question of injury to others.

In the opinion quoted, it is evidently assumed that the adjudications of water rights were uniformly based upon correct statements of facts as to dimensions and capacity of ditches, which, in a large number of cases, is unfortunately not true, and possibly contemplates only such injurious effects as might result from a change of use, as from mechanical to agricultural purposes.

Under the law, this department has the general supervising control of the public waters of the State, and the distribution of those waters is regulated by the priority and quantity allotted to each ditch by the decree of the court; that is, the decrees as tabulated and placed in the hands of the Water Commissioners, are made the basis for distribution.

The quantity decreed in very many cases exceeds several fold the capacity of the respective ditches to

carry, but so long as such excessive quantity is attached to the ditch with which the right is alleged to have ripened, there is little danger of injury to others from a misappropriation of water, as the quantity diverted would be controlled by the capacity of the ditch. When, however, it is sought to transfer in such cases, to a ditch of larger dimensions, the full quantity decreed to a ditch or the excess above its carrying capacity, it at once becomes apparent that injurious consequences will result to some one.

It is claimed that the decrees are *prima facie* evidence of the rights of the parties holding them; that a court only has the right to go behind the adjudication and make inquiry as to the actual diversion and use of the water; and that upon presentation of a proper certificate of purchase, this department, without considering the equities in the case, should permit of the transfer. Such a course would work serious injury to the parties who have appropriated and used for a series of years the excess of waters claimed by the erroneous decrees, and to prevent this, so far as possible, it has been the practice of this department to permit of no transfers from one ditch to another without first making a careful measurement of the ditch from which the right is sought to be alienated and an examination of the surrounding conditions connected therewith. In a majority of the cases presented the priorities are among the oldest in the district, the ditches small and frequently in disuse and the area of cultivated lands under them so limited as to render it impracticable to use the quantity of water decreed beneficially upon them.

In most cases a sufficient quantity of water is retained with the ditch—generally its full capacity—to irrigate all lands under it. In one or two instances the ditches had ample dimensions for the amount decreed, but it is very questionable whether such amount had ever been or could be put to a beneficial use on the small areas under their lines.

As an illustration of the latter, on July 7, 1892, notice was received by this office of the purchase by the City of Fort Collins from A. T. Gilkerson of four cubic feet of water per second of time, "the same being part and parcel of the appropriation of the John R. Brown ditch, known as priority number fourteen ac-

ording to the decree of the District Court of the Second Judicial District of Colorado.

It was expressly agreed and understood in the deed conveying the said four cubic feet of water per second to the city of Fort Collins, "that it is that particular part of said appropriation which had been used for a beneficial purpose by the party of the first part and his grantor, each and every year since the rendering of said decree, more particularly described as the four feet which by the Water Commission of District No. 3, Division No. 1 of Colorado, is reported as having been used."

The John R. Brown ditch has a priority dating back to May 1, 1865, for eight cubic feet per second, and is one mile in length.

In 1887 the Water Commissioner reported 200 acres as having been irrigated therefrom. In 1890 he reported the average amount carried in the ditch during the season at four cubic feet per second.

Number of acres possible to irrigate.....	280
Number of acres irrigated.....	266
In 1892, average number cubic feet per second carried	3½
Number of acres possible to irrigate.....	280
Number of acres irrigated.....	266

Upon receipt of the above notice of transfer the Water Commissioner was instructed in part and effect as follows: "If the statement in the deed is true that four cubic feet of water per second have been carried through said ditch each year and used for a beneficial purpose, you will permit the transfer of such quantity to the city conduits. If my conclusions are correct that the above quantity transferred is all that has been diverted and beneficially used through said ditch, you will close the same down, to remain closed during all times of scarcity of water in the river, or when there is a demand for all the water by other ditches, * * * It being the purpose in permitting such transfer to guard against others being injuriously affected thereby, through the future diversion of water under an old decree, the right to which up to this time may never have been asserted." The Water Commissioner replying, reported that the ditch would carry the full amount of the decree and that the quantity actually diverted

and used was so uncertain he did not feel warranted in closing.

Cases of this kind should be matters of judicial inquiry and settlement ; and it is questionable whether, with the uncertain status of rights under the old decrees, all applications for a change in the point of diversion from the actual stream, under sale, should not be submitted to a competent court for the determination of the question of injury to others. At all events there should be some statutory regulation of the matter, by which the parties in interest would be required to furnish some official certificate that the ditch from which the water rights in part or as a whole are sought to be alienated is entitled by appropriation and use to the same, setting forth the quantity sold and the rights, if any, remaining in the ditch. Such a document filed in the office of the State Engineer would enable this department to keep a record of such transfers and furnish the warrant of authority for the distribution in conformity therewith.

GAUGING STATIONS.

The importance to irrigation of continuing observations on the discharge of the principal streams of the State is fully recognized, and the gaugings have been kept up to the fullest extent practicable with the means at command ; but the efficiency of the work has been somewhat impaired from the want of permanent and unchangeable stations, and quite a percentage of allowance will have to be made for the results obtained.

The limited appropriation for the State Engineer's assistant fund has rendered it impossible to make such improvements as could be desired for the more accurate measurements of the streams heretofore gauged, and has precluded the possibility of establishing new observation stations on some of the water channels of the western slope, where their importance would seem equally as apparent. Nor has it been practicable to continue the observations beyond the irrigating season for the same reason, excepting in the case of the Cache la Poudre river, where there is a register which requires attention but once a week.

It is a matter of regret that these measurements cannot be continued on all the streams in the South Platte division throughout the year, in order that a close estimate might be made of the annual discharge, and some basis given for the storage of water during the non-irrigating season.

A thorough knowledge of the water supply is essential in determining the area that can be irrigated therefrom, and enterprises looking to the conservation of the supply will be prosecuted with much more confidence when its extent is definitely known.

That the irrigable area can be largely extended from the flow in the streams during those portions of the year when not applied directly to the lands, can be readily seen from the rough estimates following in a table of winter discharges, which are based upon the gaugings of the Cache la Poudre during the winter months and the early and late gaugings on the other streams, the proportionate increase or decrease being given to the latter streams that their volumes at such gaugings bear to the former.

Of course, there are opportunities for storage at the high stages of the streams during the irrigating season and following heavy rainfalls which are not included in these estimates.

For the table of discharges of the Arkansas and Rio Grande rivers this office is indebted to the continued courtesies of Prof. F. H. Newell, of the United States Geological Survey, the stations on those rivers having been thus far kept up by that department, and for the past season on the Cache la Poudre to Prof. L. G. Carpenter, of the Agricultural College; the registering instrument and all appurtenances at the latter station belonging to the State, having been destroyed during the heavy flood in 1891, occasioned by the breaking of the Chambers lake dam, and another instrument substituted by Prof. Carpenter.

For the payment of observers during the year 1891 and 1892, at all the gauging stations maintained by this department, there has been expended the sum of \$545.35, the list embracing nine stations and different observers, as shown in the itemized statement of expenditures from the assistant fund.

Following will be found the report in detail on gauging stations made by Assistant L. R. Hope, in charge of field-work, together with estimated cost of constructing permanent stations on the several streams:

Gauging Station No. 1, Cache la Poudre River. Location about twelve miles above Fort Collins, consists of rubble masonry side walls, with natural boulder and gravel bed of river for floor, instrument-house and clock work register. The area of cross-section varies from nothing to twenty-five square feet, due to scouring as volume increases. To place the station in good working order, there should be laid a stone or concrete floor between the walls, the banks rip-rapped above and below for about 100 feet, and some small bowlders removed from bed of stream to prevent cross-currents and eddies. Estimated cost, \$1,200.00.

June 9, 1891, the instrument-house and clock work register were washed away by a flood, caused by the breaking of the waste-way to the Chambers Lake reservoir at the head of the Cache la Poudre River. The house was rebuilt at a cost of \$30.00, and a new instrument supplied at a cost of \$75.00. Fair results are obtained from this station, with the exception of the scouring before mentioned.

Gauging Station No. 2, Arkansas River, at Canon City. All records taken by the General Government.

Gauging Station No. 3, South Platte River. Location in 1891, about twenty-seven miles above Denver, removed in 1892 to Platte Canon, to get under the protecting wing of a new observer, the old one having moved away. This station has a plain gauge rod which demands three readings daily, has a modified form of cross-section, with each radical change in volume, and requires frequent visits on the part of an Engineer, to make measurements and note of changes.

The stream from its importance would seem to merit a permanently constructed station not kept on wheels, with an instrument for registering that would require attention but once a week. A suitable location can be obtained above all ditches in the canon, and a structure built at a total cost of about \$800.

Gauging Station No. 3, "B." Location, South Platte River at foot of Sixteenth street, Denver. Obser-

vations were taken at this station for the season of 1891 as a check on the amount of water flowing into District No. 2, but owing to its shifting sand bed the results were not reliable and the observations were discontinued.

Gauging Station No. 4, Clear Creek. Location, five miles above Golden. Readings taken from the plain rod.

The difficulties attending observations on this stream were fully set forth in the Fifth Biennial Report to the Governor. The unfavorable conditions have not improved with time. Observations were taken during the season of 1891, but were so unreliable as not to be worthy of tabulation, and they were discontinued the following season. A permanent station will cost about \$700.

Gauging Station No. 5, St. Vrain Creek. Location in 1891, just below the junction of the North and South Forks, where observations were taken for that season. The results not being entirely satisfactory, it was deemed advisable to change the location, and in order to get above the head-gates of all ditches it was found necessary to establish a station on both the North and South branches. This was done in May, 1892. The station on the North branch was located at the upper wagon-road bridge at Lyons, the abutments of the bridge forming the side walls, the floor consisting of broken rock dumped in when the bridge was built. This can be made a reliable and permanent station by flagging the creek bed, rip-rapping the banks above and below, and including instrument house and register will cost about \$300.

Gauging Station No. 5 "A," South Branch St. Vrain. Located two and one-half miles above Lyons, for the convenience of an observer. The banks and bed are composed of bowlders and gravel and are open to the criticisms heretofore made on channels with similar conditions.

Gauging Station No. 6, Bear Creek. Located at Morrison. Observations were taken in 1891, but on account of its minor importance and in the interest of economy were discontinued in 1892.

Gauging Station No. 7, Boulder Creek. Location two and one-half miles above Boulder City. No change has been made in this station since last report. It has dry masonry walls, an instrument house and register, and gives very fair satisfaction. At small expense in removing a few bowlders it can be put in good order.

Gauging Station No. 8, Big Thompson Creek. Occupies old site about ten miles west of Loveland. Permanent improvements with register, etc., will cost about \$800.00.

Gauging Station No. 9, South Boulder Creek, is maintained at old location and has proven fairly satisfactory.

Following will be found tabulated statements showing the results of observations taken at the several stations during the years 1891 and 1892. Also a comparative table showing the mean discharge from June 1 to September 30 for the years 1889, 1890, 1891 and 1892:

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME OF THE CACHE LA POUDRE RIVER, AT GAUGING STATION
No. 1, FOR

1891.

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Day
1	86	131	70	39	355	2005	784	292	148	151	100	84	1
2	83	118	63	50	394	1979	849	284	151	148	98	95	2
3	61	109	59	59	441	1790	864	273	155	145	98	72	3
4	50	100	52	48	565	1542	824	269	158	128	95	54	4
5	50	89	50	48	806	1634	768	269	151	131	84	60	5
6	46	83	50	54	1053	*1840	832	251	134	134	84	72	6
7	44	66	55	59	1160	1902	1003	233	131	141	77	72	7
8	46	63	71	75	1239	2436	907	212	138	134	72	77	8
9	52	66	73	86	1179	5060	768	200	138	122	72	77	9
10	52	66	68	97	1044	3600	699	*200	138	115	77	82	10
11	66	68	66	109	823	3065	626	192	138	112	82	109	11
12	76	68	66	109	908	2635	558	184	138	112	82	100	12
13	76	68	61	103	710	2190	531	180	138	112	87	100	13
14	78	66	55	81	766	1860	524	173	128	112	84	100	14
15	86	66	52	71	710	1728	512	208	125	112	79	98	15
16	109	57	52	68	970	1624	492	225	125	112	67	100	16
17	109	57	54	78	1092	1501	462	220	125	115	72	92	17
18	112	57	54	134	1130	1373	432	233	122	122	72	74	18
19	145	57	57	166	1208	1752	426	238	118	112	70	72	19
20	131	59	63	166	1250	1579	415	238	115	112	82	72	20
21	131	66	73	159	1312	1545	392	242	138	112	100	72	21
22	131	71	76	159	1355	1479	381	269	138	112	95	72	22
23	145	73	73	194	1409	1534	354	288	138	115	84	74	23
24	131	68	70	214	1858	1545	322	273	141	112	84	92	24
25	131	83	66	258	2499	1848	302	229	141	109	82	87	25
26	141	86	57	296	2273	1579	283	229	141	106	87	56	26
27	115	86	52	338	2173	1260	278	220	141	107	84	56	27
28	83	83	46	323	1979	1049	288	217	148	106	84	72	28
29	88	----	42	323	2018	1076	307	192	151	104	82	72	29
30	88	----	40	344	2044	985	307	173	151	104	84	72	30
31	109	---	32	----	----	----	298	155	----	104	----	72	31
Mean	92	79	59	144	1221	1900	541	228	171	118	83	79	Mean

*NOTE—From June 7 to August 10 gauge heights were measured by J. L. Armstrong, Water Commissioner of District No. 3. The instrument house, including self-recording register, was carried away on June 9 by floods, caused by cutting or breaking of the waste-way of Chamber's Lake reservoir, the maximum discharge of which approximated 21,000 cubic feet per second.

TABLE

SHOWING DAILY MEAN DISCHARGE, IN CUBIC FEET PER SECOND OF TIME, OF THE CACHE LA POUDRE RIVER, AT GAUGING STATION NO. 1, FOR

1892.

Day	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day
1	70	98	128	60	----	750	1392	327	----	----	----	----	1
2	65	98	134	67	----	786	1340	322	----	----	----	----	2
3	54	98	134	60	----	1112	870	307	----	----	----	----	3
4	50	104	128	60	----	1415	1020	293	----	----	----	----	4
5	52	104	122	72	----	1002	993	272	----	----	----	----	5
6	52	104	106	72	----	960	950	268	----	----	----	----	6
7	50	112	98	72	----	1084	908	288	----	----	----	----	7
8	54	104	92	72	----	1260	984	271	----	----	----	----	8
9	60	112	94	84	----	1468	1084	302	----	----	----	----	9
10	60	112	60	92	----	1636	1000	288	----	----	----	----	10
11	60	122	60	98	----	1522	960	251	----	----	----	----	11
12	60	122	62	98	----	1260	857	232	----	----	----	----	12
13	58	115	72	98	----	1114	822	202	----	----	----	----	13
14	58	128	72	98	----	1200	784	228	----	----	----	----	14
15	54	128	72	98	----	1457	736	202	----	----	----	----	15
16	50	128	72	112	----	1360	698	192	----	----	----	----	16
17	50	128	40	112	----	1658	648	----	----	----	----	----	17
18	54	128	60	----	276	1444	639	----	----	----	----	----	18
19	56	134	72	----	282	1645	564	----	----	----	----	----	19
20	63	125	72	----	278	1579	530	----	----	----	----	----	20
21	72	112	72	----	270	2535	584	----	----	----	----	----	21
22	72	109	72	----	292	2450	558	----	----	----	----	----	22
23	72	109	72	----	388	2285	512	----	----	----	----	----	23
24	72	112	72	----	570	2312	538	----	----	----	----	----	24
25	72	112	67	----	618	2178	493	----	----	----	----	----	25
26	72	128	50	----	847	2165	443	----	----	----	----	----	26
27	72	128	50	----	1067	1564	402	----	----	----	----	----	27
28	72	134	50	----	1084	1445	396	----	----	----	----	----	28
29	83	128	50	----	1067	1392	380	----	----	----	----	----	29
30	92	----	50	----	1075	1332	348	----	----	----	----	----	30
31	98	----	56	----	872	----	342	----	----	----	----	----	31
Mean	64	119	80	84	642	1512	741	265	----	----	----	----	Mean

NOTE—From January 1 to April 17, river heights were measured by J. L. Armstrong, Water Commissioner of District No. 3.

From May 18 to August 16, record and gaugings were taken by Prof. L. G. Carpenter, of the State Agricultural College, after which time, the river fell so low that the float ceased to work and all further records were stopped.

TABLE.

SHOWING DAILY MEAN DISCHARGE, IN CUBIC FEET PER SECOND OF
TIME OF THE ARKANSAS RIVER, AT CANON CITY, FURNISHED BY
THE U. S. GEOLOGICAL SURVEY., FOR

1891.

Day.	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.
1	480	480	555	580	1340	2190	2390	1925	505	715	505	505	1
2	455	480	630	605	1600	2025	2190	1690	530	825	505	455	2
3	410	480	685	605	1645	1735	2080	1510	505	795	505	555	3
4	345	430	660	605	1600	1600	1925	1340	505	770	530	555	4
5	365	410	630	605	1875	1600	1975	1175	480	740	480	345	5
6	430	530	580	605	2515	1780	1975	1100	480	715	480	345	6
7	410	505	555	685	2990	1922	1975	1065	480	685	480	365	7
8	365	505	530	795	3370	2190	1820	1215	480	660	480	345	8
9	430	365	505	795	2990	3295	1690	1065	480	660	480	530	9
10	385	365	530	740	2735	3635	1465	1175	480	630	480	505	10
11	305	365	555	885	2515	3550	1340	1025	455	630	505	530	11
12	345	430	555	1060	2660	3890	1175	955	430	630	480	530	12
13	365	430	530	955	2315	4230	1140	955	430	660	505	555	13
14	430	505	555	885	2585	3720	1100	885	410	660	530	605	14
15	505	480	580	885	2250	3070	1100	855	385	605	530	530	15
16	505	530	605	855	1922	2990	1065	795	385	580	505	505	16
17	480	580	580	825	1875	2735	1025	770	365	580	430	480	17
18	430	530	580	795	1820	3070	955	740	365	580	480	505	18
19	430	505	580	740	1735	3380	955	795	365	580	530	480	19
20	505	480	580	685	1690	3635	920	795	345	580	530	505	20
21	480	480	555	660	2025	3635	920	740	345	580	530	505	21
22	480	505	605	660	1922	3635	795	630	345	580	505	530	22
23	480	505	605	795	1510	3720	770	630	365	555	455	480	23
24	480	505	685	855	1340	3550	885	660	480	555	530	345	24
25	505	530	580	1140	1465	3465	920	605	555	530	505	345	25
26	480	430	580	1100	1425	3295	1255	580	715	555	505	365	26
27	455	430	580	1600	1510	3050	1380	580	685	555	505	455	27
28	430	505	630	990	1555	2810	1215	555	630	530	480	555	28
29	385	----	605	1340	1645	2735	1735	580	630	530	530	480	29
30	385	----	605	1380	1875	2585	2810	555	605	530	455	455	30
31	410	----	580	----	2080	----	2585	530	----	555	----	530	31
Mean	431	474	586	857	2012	3291	1468	951	473	624	498	476	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF TIME, OF THE ARKANSAS RIVER, AT CANON CITY, FURNISHED BY THE U. S. GEOLOGICAL SURVEY, FOR

1892.

Day.	Jan.	Feb.	Mar.	April	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.
1	530	555	505	455	1215	1925	3050	1100	480	455	605	----	1
2	530	505	505	455	1140	2025	2990	990	455	455	580	----	2
3	385	530	555	480	1060	1975	2735	885	480	455	530	----	3
4	555	530	555	505	955	1780	2515	855	530	480	555	----	4
5	430	505	580	385	795	1975	2250	855	505	455	580	----	5
6	480	505	555	365	715	2025	1975	800	455	480	605	----	6
7	530	505	505	410	685	1875	1925	740	455	455	505	----	7
8	530	430	505	410	885	2135	2025	1130	455	480	480	----	8
9	555	430	553	410	795	2515	2735	----	455	455	480	----	9
10	530	455	555	455	770	2585	2380	----	430	410	455	----	10
11	345	480	530	505	740	2735	2250	----	410	455	455	----	11
12	430	530	505	480	825	2080	2025	825	385	480	605	----	12
13	430	505	580	480	955	2080	1925	740	385	505	555	----	13
14	345	505	580	555	1060	2480	1925	770	365	505	530	----	14
15	345	480	605	555	1060	2515	1825	715	430	530	580	----	15
16	430	430	580	530	1025	2190	1710	660	365	530	555	----	16
17	480	455	455	480	1135	2250	1600	580	365	530	530	----	17
18	505	505	410	530	1060	2480	1510	555	430	530	505	----	18
19	505	505	580	580	1060	2810	1255	580	480	530	505	----	19
20	530	530	605	605	1175	2990	1175	530	430	555	530	----	20
21	530	555	605	630	1255	3465	1135	530	455	580	555	----	21
22	530	530	555	605	1255	3805	1060	530	430	605	555	----	22
23	505	480	530	605	1380	3805	1060	555	385	605	555	----	23
24	530	455	505	605	1690	3890	1175	715	480	580	530	----	24
25	530	480	530	505	2135	4750	1060	1135	385	555	505	----	25
26	555	480	480	505	2080	4570	1215	770	385	530	----	----	26
27	530	505	480	580	2135	4145	1380	660	455	555	----	----	27
28	555	455	480	630	2250	3465	1780	580	430	580	----	----	28
29	555	480	480	660	2135	3895	1555	530	455	580	----	----	29
30	530	----	455	715	2080	2990	1340	480	455	555	----	----	30
31	630	----	430	----	1975	----	1175	455	----	580	----	----	31
Mean	496	480	527	522	1593	2803	1798	726	435	511	533	----	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND
OF TIME OF THE SOUTH PLATTE RIVER, AT GAUGING STATION
NO. 3, FOR

1891.

Day.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Day.
1	-----	-----	1316	814	-----	247	-----	1
2	-----	-----	1214	775	-----	260	-----	2
3	-----	-----	1150	744	-----	265	-----	3
4	-----	-----	1097	732	525	232	-----	4
5	121	-----	1290	725	477	230	-----	5
6	125	-----	1425	832	453	212	-----	6
7	126	1078	1406	775	434	198	-----	7
8	140	1157	1483	882	400	189	-----	8
9	135	1176	1495	814	562	184	-----	9
10	140	1147	1470	720	543	221	-----	10
11	148	1078	1418	624	509	221	-----	11
12	165	1014	1476	562	453	212	-----	12
13	-----	939	1413	527	406	202	-----	13
14	-----	927	1440	487	434	198	-----	14
15	-----	970	1322	552	397	189	-----	15
16	-----	950	1387	568	453	179	-----	16
17	-----	901	1387	537	400	165	-----	17
18	-----	939	1290	384	497	146	-----	18
19	-----	901	1271	453	471	156	-----	19
20	-----	890	1220	436	455	151	-----	20
21	-----	964	1187	406	430	170	-----	21
22	-----	1014	1157	344	409	175	-----	22
23	-----	1220	1135	328	416	202	-----	23
24	-----	1157	1102	359	400	221	-----	24
25	-----	1090	1068	384	347	254	-----	25
26	-----	1207	1038	525	282	273	-----	26
27	-----	1457	968	584	270	314	-----	27
28	-----	1483	927	610	273	324	-----	28
29	-----	1483	895	568	263	305	-----	29
30	-----	1413	857	732	266	286	-----	30
31	-----	1360	-----	2195	347	-----	-----	31
Mean.	-----	1117	1243	645	373	219	-----	Mean

TABLE.

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND
OF TIME OF THE SOUTH PLATTE RIVER AT GAUGING STATION
NO. 3, FOR

1892.

Day.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Day
1	-----	-----	649	817	779	341	280	1
2	-----	-----	672	883	727	324	280	2
3	-----	-----	500	838	719	300	280	3
4	-----	-----	435	790	710	332	280	4
5	-----	-----	384	745	685	324	270	5
6	-----	-----	387	717	715	341	270	6
7	-----	-----	376	723	830	335	270	7
8	-----	-----	414	901	747	335	270	8
9	-----	-----	439	955	782	350	270	9
10	-----	-----	450	973	767	335	270	10
11	-----	-----	425	920	768	335	280	11
12	-----	-----	506	852	700	318	295	12
13	-----	-----	520	841	648	295	318	13
14	-----	-----	551	820	616	287	437	14
15	-----	-----	613	830	607	297	449	15
16	-----	-----	580	916	453	290	416	16
17	-----	-----	633	873	412	295	482	17
18	-----	-----	661	916	374	307	527	18
19	-----	-----	711	836	377	303	468	19
20	-----	-----	713	745	365	300	472	20
21	-----	-----	768	761	365	297	458	21
22	-----	-----	752	809	365	290	464	22
23	-----	-----	786	792	362	275	479	23
24	-----	-----	826	847	360	280	472	24
25	-----	-----	823	833	297	764	472	25
26	-----	-----	962	847	320	478	481	26
27	-----	-----	941	878	350	280	481	27
28	-----	-----	827	927	355	280	492	28
29	-----	620	769	923	350	280	492	29
30	-----	620	769	901	345	280	492	30
31	-----	637	-----	844	345	-----	492	31
Mean	-----	-----	628	847	535	328	392	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME OF ST. VRAIN CREEK, AT GAUGING STATION No. 5, FOR

1891.

Day.	April.	May.	June.	July.	August.	Sept.	Oct.	Day.
1	38	400	937	886	205	71	-----	1
2	43	433	922	857	205	71	-----	2
3	33	355	740	814	220	68	-----	3
4	38	400	755	901	174	61	-----	4
5	31	450	888	916	174	57	-----	5
6	43	433	855	901	181	54	-----	6
7	50	467	922	988	164	50	-----	7
8	50	580	946	828	152	117	-----	8
9	46	598	969	785	158	89	-----	9
10	43	547	1159	741	152	83	-----	10
11	63	515	1195	622	152	83	-----	11
12	58	498	1253	515	132	83	-----	12
13	64	433	1282	433	112	83	-----	13
14	64	433	1253	460	108	79	-----	14
15	73	370	1133	390	126	71	-----	15
16	73	387	1038	375	141	68	-----	16
17	79	400	973	344	169	75	-----	17
18	273	370	1120	328	220	96	-----	18
19	210	433	1253	285	230	108	-----	19
20	210	420	1159	344	174	87	-----	20
21	260	433	1060	300	174	71	-----	21
22	245	533	1045	230	196	75	-----	22
23	260	598	1159	240	181	136	-----	23
24	210	615	1165	258	152	164	-----	24
25	387	1081	1297	314	117	164	-----	25
26	387	1350	1195	445	92	164	-----	26
27	400	1397	1045	390	112	152	-----	27
28	433	1397	988	314	83	147	-----	28
29	418	1223	872	314	75	122	-----	29
30	387	983	814	258	83	112	-----	30
31	-----	969	-----	230	79	110	-----	31
Mean	165	629	1046	516	151	96	-----	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND
OF TIME OF THE SOUTH FORK OF ST. VRAIN CREEK, AT GAUGING
STATION, NO. 5 A, FOR

1892.

Day.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Day.
1	-----	-----	169	592	81	34	24	1
2	-----	-----	182	530	79	34	24	2
3	-----	-----	323	412	85	60	24	3
4	-----	-----	463	388	79	42	28	4
5	-----	-----	278	351	74	38	24	5
6	-----	-----	216	362	85	38	22	6
7	-----	-----	230	438	81	34	22	7
8	-----	-----	351	463	100	34	24	8
9	-----	-----	490	376	116	34	24	9
10	-----	-----	504	452	85	30	24	10
11	-----	-----	463	362	72	30	24	11
12	-----	-----	351	312	62	30	24	12
13	-----	-----	286	278	57	28	24	13
14	-----	-----	362	240	57	28	30	14
15	-----	-----	401	240	60	28	30	15
16	-----	-----	323	266	57	28	28	16
17	-----	-----	300	300	52	24	28	17
18	-----	-----	351	193	52	28	30	18
19	-----	-----	504	158	55	24	30	19
20	-----	-----	635	148	50	24	29	20
21	-----	-----	740	158	52	24	29	21
22	-----	-----	876	216	57	24	29	22
23	-----	-----	876	176	52	24	24	23
24	-----	-----	860	169	47	24	24	24
25	-----	-----	796	138	47	22	22	25
26	-----	-----	660	135	42	22	22	26
27	-----	-----	582	169	42	23	22	27
28	-----	-----	514	148	42	24	19	28
29	-----	463	463	119	38	24	19	29
30	-----	428	660	108	38	24	19	30
31	-----	230	-----	100	34	-----	19	31
Mean	-----	373	474	274	60	30	25	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME, OF THE NORTH FORK OF ST. VRAIN CREEK, AT GAUGING
STATION NO. 5, FOR

1892.

Day.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Day.
1	-----	-----	166	540	167	59	33	1
2	-----	-----	166	456	140	59	33	2
3	-----	-----	229	363	130	59	33	3
4	-----	-----	335	363	132	54	33	4
5	-----	-----	229	349	130	54	33	5
6	-----	-----	203	320	130	54	33	6
7	-----	-----	185	380	130	48	33	7
	-----	-----	380	465	145	48	33	8
9	-----	-----	312	415	136	46	33	9
10	-----	-----	489	355	105	44	32	10
11	-----	-----	340	387	105	87	32	11
12	-----	-----	290	340	105	87	48	12
13	-----	-----	340	340	96	87	40	13
14	-----	-----	303	349	87	87	40	14
15	-----	-----	380	303	87	87	40	15
16	-----	-----	327	355	87	87	40	16
17	-----	-----	363	307	79	87	40	17
18	-----	-----	375	327	79	87	40	18
19	-----	-----	450	225	82	87	44	19
20	-----	-----	489	215	76	87	44	20
21	-----	-----	570	225	72	59	44	21
22	-----	-----	597	251	72	59	44	22
23	-----	-----	550	225	72	33	54	23
24	-----	-----	620	303	72	34	87	24
25	-----	-----	597	290	67	33	87	25
26	-----	190	527	210	61	33	33	26
27	-----	303	456	295	59	33	33	27
28	-----	237	415	215	72	33	34	28
29	-----	244	380	220	65	33	34	29
30	-----	225	387	160	63	33	33	30
31	-----	190	-----	156	59	-----	34	31
Mean	-----	231	382	313	95	59	40	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME OF BEAR CREEK, AT GAUGING STATION NO. 6 FOR

1891.

Day.	April.	May.	June.	July.	August.	Sept.	Oct.	Day.
1	-----	107	330	204	68	23	-----	1
2	-----	107	280	180	57	23	-----	2
3	-----	107	255	147	52	20	-----	3
4	-----	107	230	155 *	41	20	-----	4
5	12	136	605	170	34	20	-----	5
6	19	107	263	155	33	20	-----	6
7	22	125	375	197	29	18	-----	7
8	22	107	375	155	29	18	-----	8
9	17	107	476	107	29	18	-----	9
10	21	107	460	90	26	18	-----	10
11	32	94	390	90	26	16	-----	11
12	30	90	375	90	26	16	-----	12
13	32	71	330	81	26	16	-----	13
14	28	68	280	71	26	16	-----	14
15	36	68	280	62	26	14	-----	15
16	29	68	330	59	30	14	-----	16
17	33	68	280	56	35	14	-----	17
18	36	68	280	52	41	13	-----	18
19	41	68	280	52	41	13	-----	19
20	42	90	330	52	41	12	-----	20
21	42	136	330	48	37	12	-----	21
22	47	180	336	46	33	12	-----	22
23	52	180	330	41	26	20	-----	23
24	75	230	330	41	26	52	-----	24
25	90	410	330	41	23	52	-----	25
26	100	476	280	52	23	52	-----	26
27	107	622	230	52	20	52	-----	27
28	125	599	230	52	20	52	-----	28
29	107	518	230	52	20	52	-----	29
30	107	452	230	62	26	52	-----	30
31	-----	375	---	68	26	-----	-----	31
Mean	50	195	289	90	32	25	-----	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME OF BOULDER CREEK, AT GAUGING STATION NO. 7, FOR

1891.

Day.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Day.
1	-----	-----	404	326	177	81	-----	1
2	-----	-----	373	329	160	69	-----	2
3	-----	-----	354	332	138	69	-----	3
4	-----	-----	332	332	123	64	-----	4
5	-----	-----	344	332	121	69	-----	5
6	-----	-----	363	354	121	64	-----	6
7	-----	-----	456	373	121	59	-----	7
8	-----	-----	540	367	115	68	-----	8
9	-----	-----	529	354	121	64	-----	9
10	-----	-----	529	280	118	57	-----	10
11	-----	-----	467	264	114	57	-----	11
12	-----	-----	467	233	107	57	-----	12
13	-----	-----	456	253	100	57	-----	13
14	-----	-----	467	233	96	57	-----	14
15	-----	-----	424	227	100	55	-----	15
16	-----	-----	394	224	135	54	-----	16
17	-----	-----	354	202	125	54	-----	17
18	-----	224	384	186	186	54	-----	18
19	-----	233	467	186	153	54	-----	19
20	-----	253	470	186	121	55	-----	20
21	-----	264	467	177	118	-----	-----	21
22	-----	253	467	160	128	-----	-----	22
23	-----	264	467	150	107	-----	-----	23
24	-----	282	467	146	118	-----	-----	24
25	-----	363	467	146	81	-----	-----	25
26	-----	435	414	177	83	-----	-----	26
27	-----	414	400	214	83	-----	-----	27
28	-----	394	363	188	87	-----	-----	28
29	-----	404	384	169	81	-----	-----	29
30	-----	404	354	169	79	-----	-----	30
31	-----	394	-----	181	69	-----	-----	31
Mean	-----	327	427	240	116	61	-----	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME OF BOULDER CREEK, AT GAUGING STATION NO. 7, FOR

1892.

Day.	April.	May.	June.	July.	August	Sept.	Oct.	Day.
1	-----	-----	354	529	224	64	48	1
2	-----	-----	394	518	214	64	45	2
3	-----	-----	313	445	205	64	40	3
4	-----	-----	363	445	195	69	37	4
5	-----	-----	354	414	195	64	35	5
6	-----	-----	313	404	186	64	40	6
7	-----	-----	292	445	186	64	41	7
8	-----	-----	344	497	205	64	42	8
9	-----	-----	384	445	214	64	42	9
10	-----	-----	404	435	186	64	41	10
11	-----	-----	404	424	177	64	50	11
12	-----	-----	354	414	169	59	45	12
13	-----	-----	313	373	160	54	41	13
14	-----	-----	344	373	160	49	50	14
15	-----	-----	424	404	144	49	50	15
16	-----	-----	404	363	135	49	50	16
17	-----	-----	394	363	135	49	49	17
18	-----	-----	424	322	153	49	38	18
19	-----	-----	508	322	135	54	27	19
20	-----	-----	612	313	121	49	45	20
21	-----	-----	633	322	121	49	45	21
22	-----	-----	633	384	121	49	48	22
23	-----	300	646	354	114	48	49	23
24	-----	313	633	322	107	45	40	24
25	-----	313	612	303	100	41	41	25
26	-----	322	581	282	93	42	41	26
27	-----	363	508	303	93	42	45	27
28	-----	373	497	303	93	45	42	28
29	-----	373	487	264	87	45	42	29
30	-----	344	487	233	75	48	45	30
31	-----	322	-----	224	69	-----	37	31
Mean	-----	336	447	372	148	47	43	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME OF BIG THOMPSON CREEK, AT GAUGING STATION NO. 8, FOR

1891.

Day.	April.	May.	June.	July.	August.	Sept.	Oct.	Day.
1	-----	-----	-----	634	176	91	93	1
2	-----	-----	-----	589	179	105	-----	2
3	-----	-----	-----	612	165	105	-----	3
4	-----	-----	523	631	157	99	-----	4
5	-----	-----	583	565	142	96	-----	5
6	-----	-----	563	584	140	92	-----	6
7	-----	-----	739	608	140	94	-----	7
8	-----	-----	1040	574	140	98	-----	8
9	-----	-----	1084	517	150	85	-----	9
10	-----	-----	970	446	150	83	-----	10
11	-----	-----	841	388	145	85	-----	11
12	-----	-----	810	370	153	85	-----	12
13	-----	-----	974	388	157	105	-----	13
14	-----	-----	954	333	137	94	-----	14
15	-----	-----	857	339	140	77	-----	15
16	-----	-----	772	327	227	69	-----	16
17	-----	-----	614	314	235	69	-----	17
18	-----	-----	841	314	218	69	-----	18
19	-----	-----	971	314	214	69	-----	19
20	-----	-----	978	301	225	71	-----	20
21	-----	-----	825	314	198	76	-----	21
22	-----	-----	800	270	239	102	-----	22
23	-----	-----	891	263	168	134	-----	23
24	-----	-----	984	253	143	134	-----	24
25	-----	-----	1182	253	107	127	-----	25
26	-----	-----	1078	224	142	137	-----	26
27	-----	-----	858	244	105	99	-----	27
28	-----	-----	701	235	105	99	-----	28
29	-----	-----	865	219	105	99	-----	29
30	-----	-----	602	227	114	93	-----	30
31	-----	-----	-----	224	107	-----	-----	31
Mean	-----	-----	817	383	159	95	-----	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND
OF TIME OF BIG THOMPSON CREEK, AT GAUGING STATION
NO. 8, FOR

1892.

Day.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Day.
1	-----	-----	403	864	247	90	-----	1
2	-----	-----	415	791	225	87	-----	2
3	-----	-----	490	603	200	71	-----	3
4	-----	-----	547	550	200	72	-----	4
5	-----	-----	342	617	195	72	-----	5
6	-----	-----	329	559	195	75	-----	6
7	-----	-----	480	563	200	72	-----	7
8	-----	-----	518	656	206	58	-----	8
9	-----	-----	630	590	217	53	-----	9
10	-----	-----	710	609	206	53	-----	10
11	-----	-----	663	543	186	48	-----	11
12	-----	-----	526	503	130	44	-----	12
13	-----	-----	421	489	155	44	-----	13
14	-----	-----	445	529	165	43	-----	14
15	-----	348	579	529	148	45	-----	15
16	-----	261	587	552	143	45	-----	16
17	-----	224	618	529	136	45	-----	17
18	-----	195	699	531	136	44	-----	18
19	-----	232	958	531	118	44	-----	19
20	-----	231	1022	485	118	42	-----	20
21	-----	231	1195	471	123	41	-----	21
22	-----	232	1140	380	123	41	-----	22
23	-----	232	1030	378	123	41	-----	23
24	-----	266	1182	461	114	41	-----	24
25	-----	377	1102	315	108	40	-----	25
26	-----	394	933	344	108	40	-----	26
27	-----	460	828	308	108	40	-----	27
28	-----	482	879	294	90	40	-----	28
29	-----	379	774	309	87	39	-----	29
30	-----	396	684	280	81	39	-----	30
31	-----	368	-----	259	81	-----	-----	31
Mean	-----	312	704	498	150	49	-----	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME OF SOUTH BOULDER CREEK, AT GAUGING STATION NO. 9, FOR
1891.

Day.	April.	May.	June.	July.	August.	Sept.	Oct.	Day.
1	28	151	464	244	74	23	19	1
2	28	141	448	220	73	26	21	2
3	28	156	389	197	70	26	18	3
4	16	156	348	190	61	24	-----	4
5	16	170	371	226	55	23	-----	5
6	15	179	338	256	57	25	-----	6
7	18	170	371	220	51	20	-----	7
8	25	410	441	197	55	20	-----	8
9	24	458	453	186	57	20	-----	9
10	18	405	464	175	48	19	-----	10
11	20	365	393	151	45	20	-----	11
12	92	348	371	147	39	20	-----	12
13	99	331	365	137	37	21	-----	13
14	93	371	371	129	37	18	-----	14
15	93	417	365	120	31	17	-----	15
16	99	367	373	120	35	17	-----	16
17	129	565	345	108	36	16	-----	17
18	144	377	315	103	55	16	-----	18
19	92	405	367	111	48	15	-----	19
20	99	400	342	108	33	16	-----	20
21	92	434	331	96	37	16	-----	21
22	99	434	315	89	67	16	-----	22
23	103	470	315	79	50	16	-----	23
24	129	458	331	76	36	18	-----	24
25	144	500	331	76	31	22	-----	25
26	115	488	322	126	28	28	-----	26
27	151	483	297	93	30	25	-----	27
28	165	488	256	92	31	22	-----	28
29	147	476	244	85	30	22	-----	29
30	137	493	238	92	27	18	-----	30
31	-----	483	-----	89	24	-----	-----	31
Mean	58	366	356	140	45	20	19	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF
TIME, OF SOUTH BOULDER CREEK, AT GAUGING STATION NO. 9,
FOR

1892

Day.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Day.
1	-----	-----	275	401	107	26	16	1
2	-----	-----	264	393	86	26	16	2
3	-----	-----	286	338	101	26	16	3
4	-----	-----	387	315	92	30	15	4
5	-----	-----	303	297	86	27	16	5
6	-----	-----	244	286	86	24	16	6
7	-----	-----	272	260	85	21	16	7
8	-----	-----	287	342	96	25	16	8
9	-----	-----	315	297	101	26	16	9
10	-----	-----	342	264	82	21	16	10
11	-----	-----	345	480	79	23	15	11
12	-----	-----	319	238	74	25	18	12
13	-----	89	287	216	64	25	15	13
14	-----	180	287	202	64	21	24	14
15	-----	180	365	216	59	18	26	15
16	-----	161	348	213	52	20	30	16
17	-----	155	345	208	52	19	27	17
18	-----	161	345	197	59	19	21	18
19	-----	180	449	186	52	19	18	19
20	-----	197	488	165	41	19	18	20
21	-----	208	512	165	38	18	19	21
22	-----	202	521	190	41	17	16	22
23	-----	231	542	186	40	16	19	23
24	-----	275	561	161	37	17	16	24
25	-----	287	493	151	40	15	16	25
26	-----	298	448	147	36	15	16	26
27	-----	308	434	165	32	15	16	27
28	-----	360	387	147	37	15	16	28
29	-----	371	382	126	39	15	16	29
30	-----	345	389	117	36	16	20	30
31	-----	315	-----	111	31	-----	20	31
Mean	-----	237	374	232	62	21	18	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE OF THE RIO GRANDE, AT DEL NORTE, FURNISHED BY U. S. GEOLOGICAL SURVEY, FOR

1891.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Day.
1	670	1320	1410	896	3240	2925	3565	1460	384	2260	450	326	1
2	670	1277	1410	896	3480	2550	3240	1320	364	2475	450	326	2
3	670	1277	1460	862	3650	2400	3000	1152	364	2120	427	326	3
4	700	1277	1460	862	3905	2260	2775	1037	364	1680	427	326	4
5	700	1234	1460	829	4350	2260	2550	896	364	1410	404	326	5
6	732	1234	1460	829	4800	2190	2475	829	345	1277	404	----	6
7	732	1234	1410	796	5650	2400	2400	764	364	1113	404	----	7
8	965	1234	1410	796	5555	2850	2260	796	404	1074	384	----	8
9	965	1234	1410	796	5460	3480	2120	796	404	1074	404	----	9
10	965	1234	1365	796	5125	4080	1990	764	385	965	404	----	10
11	965	1193	1365	862	4710	4710	1740	732	364	930	450	----	11
12	1000	1234	1320	1000	4170	5270	1565	640	345	896	427	----	12
13	1000	1234	1320	1074	3650	5555	1460	670	326	862	404	----	13
14	1000	1234	1320	1193	3400	4980	1410	640	326	829	404	----	14
15	1035	1277	1320	1410	3220	4890	1740	610	368	766	384	----	15
16	1000	1277	1320	1460	2850	3930	1460	554	308	732	384	----	16
17	1000	1277	1320	1410	2550	3820	1277	554	290	732	364	----	17
18	1035	1320	1320	1365	2330	3820	1152	527	308	670	364	----	18
19	1035	1320	1320	1320	2190	4620	1037	527	326	640	345	----	19
20	1035	1320	1320	1277	2120	4710	1074	527	345	610	326	----	20
21	1000	1320	1365	1234	2055	4985	1000	500	345	610	326	----	21
22	1035	1320	1320	1277	2550	5175	1000	500	364	582	326	----	22
23	1035	1365	1320	1277	2260	5270	965	475	500	582	308	----	23
24	1035	1365	1320	1320	2120	5460	930	450	896	554	308	----	24
25	1074	1410	1035	2120	1990	5175	896	427	1074	554	326	----	25
26	1074	1410	1000	2700	1860	5080	862	404	1234	527	326	----	26
27	1074	1410	1000	2700	2190	5080	862	384	1113	500	326	----	27
28	1234	1410	1000	2850	2260	4800	896	404	1075	500	326	----	28
29	1320	----	965	2925	2400	4530	1000	404	1037	475	326	----	29
30	1320	----	930	3160	2775	4260	1990	404	1193	450	326	----	30
31	1277	----	913	----	3000	----	1800	404	----	450	----	----	31
Mean	990	1294	1280	1410	3285	4146	1693	663	527	844	374	326	Mean

TABLE

SHOWING DAILY MEAN DISCHARGE OF THE RIO GRANDE AT DEL NORTE, FURNISHED BY U. S. GEOLOGICAL SURVEY, FOR

1892.

Day.	Jan.	Feb.	Mch.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.
1	----	----	----	345	2260	2260	1074	610	308	243	274	----	1
2	----	----	----	364	2055	2055	1000	582	290	243	274	----	2
3	----	----	----	404	1990	2260	965	582	290	243	258	----	3
4	----	----	----	385	1925	2475	896	554	290	243	258	----	4
5	----	----	----	364	1860	2400	796	527	290	243	258	----	5
6	----	----	----	385	1800	2400	640	527	290	243	258	----	6
7	----	----	----	450	1800	2625	670	500	274	243	258	----	7
8	----	----	----	640	1740	3160	764	475	274	243	274	----	8
9	----	----	----	732	1565	3080	1000	554	274	243	258	----	9
10	----	----	----	862	1510	2700	829	527	258	243	258	----	10
11	----	----	----	930	1620	2120	732	500	258	243	258	----	11
12	----	----	----	965	1925	2055	701	500	258	243	243	----	12
13	----	----	----	1000	2055	1990	701	475	258	258	243	----	13
14	----	----	----	1037	2120	2120	670	450	258	258	243	----	14
15	----	----	----	1320	2120	2260	640	447	258	258	258	----	15
16	----	----	----	1620	2120	2055	610	404	258	258	258	----	16
17	----	----	----	1740	2055	2190	610	404	258	258	308	----	17
18	----	----	----	1565	2190	2120	670	404	258	258	384	----	18
19	----	----	----	1320	2400	2260	582	404	258	258	404	----	19
20	----	----	----	1277	3080	2400	582	384	258	258	----	----	20
21	----	----	----	1193	3160	2550	554	384	243	274	----	----	21
22	----	----	290	1113	3400	2330	610	384	243	290	----	----	22
23	----	----	290	1074	3905	2120	582	364	243	290	----	----	23
24	----	----	310	1000	4710	2055	640	364	243	290	----	----	24
25	----	----	310	1074	4530	1990	700	364	243	290	----	----	25
26	----	----	310	1152	4350	1860	732	364	243	274	----	----	26
27	----	----	326	1277	3820	1740	764	345	243	258	----	----	27
28	----	----	326	1565	3565	1510	930	326	243	274	----	----	28
29	----	----	326	1860	3400	1320	862	326	243	274	----	----	29
30	----	----	345	2400	3160	1152	732	326	243	274	----	----	30
31	----	----	326	----	2550	----	670	308	----	258	----	----	31
Mean	----	----	316	1047	2605	2187	740	444	262	259	----	----	Mean

TABLE

SHOWING THE MEAN DISCHARGE IN CUBIC FEET PER SECOND OF TIME FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE, FOR THE SEASONS OF 1889, 1890, 1891 AND 1892.

STREAMS	1889	1890	1891	1892
Cache la Poudre.....	524	588	710	669
Big Thompson Creek.....	179	382	364	350
St. Vrain Creek.....	178	243	452	421
North and South Boulder.....	377	355	351	425
Bear Creek.....	60	27	109	----
South Platte.....	280	419	620	585
Arkansas (at Canon City).....	634	1338	1546	1440
Rio Grande (at Del Norte).....	----	1579	1757	907

TABLE

SHOWING APPROXIMATE MEAN DISCHARGE IN CUBIC FEET PER SECOND OF TIME OF THE FOLLOWING NAMED STREAMS FOR WINTER MONTHS FROM NOVEMBER 1 TO MARCH 31, AS DERIVED FROM ACTUAL GAUGINGS ON THE CACHE LA POUDE RIVER FOR THE LAST FOUR YEARS, AND SOME WINTER GAUGINGS ON OTHER STREAMS, THE SAME PERCENTAGE BEING TAKEN FOR STREAMS NOT GAUGED.

NAME OF STREAM.	APPROXIMATE MEAN DISCHARGE NOV. 1 TO MARCH 31 IN CUBIC FEET PER SECOND.
Cache la Poudre River.....	83.00=24,858 Acre Feet.
Big Thompson Creek.....	35.00=10,483 " "
St. Vrain Creek.....	66.00=19,767 " "
North and South Boulder Creeks..	54.00=16,173 " "
Clear Creek.....	49.00=14,675 " "
Bear Creek.....	22.00=6,589 " "
South Platte River.....	163.00=48,819 " "
Arkansas River.....	500.00 (mean for 1891 and '92)=153,000
Rio Grande.....	855.00 (mean for 1891)=266,000

COUNTY BOUNDARIES.

During the great mining excitement at Creede, in the midst of a wonderful building boom, and while mining locations were fast covering the adjoining hills, the question of "where are we at?" became of primary im-

portance to that camp, not only in the interest of a proper record of claims, but also, in securing recognition of official authority and in the administration of justice.

The close proximity of the camp to the common boundaries of Rio Grande, Saguache and Hinsdale Counties, as indicated by the various maps of the State, rendered its exact location with reference to either a matter of great uncertainty.

Realizing the importance of an early determination of the question, the County Commissioners of each of the Counties named petitioned the State Engineer to take such action, in accordance with the law of 1887, providing for such emergencies, as would establish the indefinite boundaries. These applications were made in the early part of February, 1892, and at a time when, on account of the high altitude and great depth of snow, it would be impracticable to do any field work for some months to come.

After a careful study of the several acts relating to said Counties and defining their boundaries, it became apparent that a solution of the problem was to be found not so much in a survey on the ground, as in a construction of the statutes, and in fixing the *locus* of one controlling point therein mentioned, to wit: "The mouth of the Canon of the Snowy Range from whence flows the Rio Grande River."

For reasons assigned in the report to the interested Counties hereto appended, and as best harmonizing with the description of the lines given in the acts alluded to, this controverted point was determined to be on the Rio Grande River at the town of Del Norte. And as a further evidence of the correctness of this location, and as indicating the general impression in early days regarding its *locus*, my attention has been called to the "Hand Book of Colorado" issued by J. A. Blake in 1874, wherein allusion is made to the location of the town of Del Norte as follows, to wit: "Del Norte: The towns of Del Norte, West Del Norte and Loma are situated on the western edge of the San Luis Valley, at the mouth of the canon of the Snowy Range of the Rocky Mountains, from whence flows the Rio Grande Del Norte."

With the fixing of the "mouth of the canon, etc.," mentioned, at Del Norte, all conflicting descriptions in

the statutes became reconciled, and the disputed boundaries became adjusted to well established government lines or natural monuments, whose identification will not admit of a doubt, and a survey on the ground was entirely unnecessary to fix the exact position of the camp over which the controversy had arisen.

Aside from the impracticability of making a survey on the ground at that time, the heavy expense attending such survey, involving from \$1,000 to \$2,000, was avoided, at least until the courts, if resort was had thereto, should pass upon the question, and the correctness of the boundaries so established was affirmed or denied.

It is true that the conclusions arrived at, as to the boundaries between Rio Grande and Saguache Counties, are not in accord with the views of the people of Saguache, as large portions of the territory claimed and heretofore conceded as belonging to that County have been placed in Rio Grande. An equitable adjustment would probably modify and change this line quite materially, but such a change can only be effected by remedial legislation, if my conclusions are sustained.

The findings in the case are herewith submitted.

BOUNDARY LINES

between the Counties of Hinsdale, Rio Grande and Saguache, in the State of Colorado, as established and defined March, 1892.

To the Board of Commissioners of the Counties of Saguache, Rio Grande and Hinsdale :

GENTLEMEN—Answering the prayer of the petitions from each of your respective Counties, which petitions are now file in this office, asking for a survey and the establishment of the uncertain and indefinite boundary lines between the Counties of Saguache, Rio Grande and Hinsdale, under the provisions of an act entitled: "An act to provide for the settlement of disputed County boundaries in this State," approved April 4, 1887, I have the honor to report the following action and conclusions :

Pursuant to a notice duly given to the County Surveyors and the County Commissioners of each of the interested counties, and setting forth the object thereof, a

meeting was held at the town of Creede on the 16th and 17th days of March, 1892, at which meeting there were present:

J. P. Maxwell, State Engineer; William McCree, County Surveyor of Saguache County; Geo. T. Nickel, Deputy County Surveyor of Rio Grande County, and J. J. Abbott, County Surveyor of Hinsdale County.

Whereupon, it was unanimously agreed that, on account of the unsettled condition of affair in the new mining camp of Creede, resulting from the uncertainty as to the exact location of the County boundaries, and in the interest of the administration of justice in said new mining camp, an emergency existed, requiring an early determination of the question of boundaries, and that, on account of the great depth of snow at that season of the year, it was impracticable to make a survey on the ground of the various disputed lines; and further, that such survey, and the heavy expense involved therein, would be entirely unnecessary in fixing and defining said boundaries to the extent and for the purposes contemplated by the petition from the Board of Commissioners of the respective Counties.

The various acts of the Legislature consulted in establishing and defining the boundaries under consideration will be found following:

The Revised Statutes of 1868, enacted and authorized by the Seventh General Assembly of the Territory of Colorado, defines the boundaries of Conejos and Saguache Counties as follows:

FOR CONEJOS COUNTY.

"Commencing on the southern boundary of the Territory in the center of the Rio Grande del Norte; thence up the center of said stream to where it leaves the canon of the Snowy Range at the corner of Saguache County; thence in a northwesterly direction along the western boundary of said Saguache County to the Cochetopa Pass; thence in a southwesterly direction on the summit of the Uncompahgre Mountains and the Sierra la Plata, forming the southern boundary of Lake County to the western line of the Territory; thence along the western boundary of the Territory to its southwest corner; thence along the southern boundary of the Territory to the place of beginning."

FOR SAGUACHE COUNTY.

Commencing at the most easterly point of La Loma del Norte ; thence in an easterly direction to the point where the Mosco Creek enters into the San Luis valley ; thence up the center of said creek to the boundary line of Fremont County on the summit of the Sangre de Christo Range ; thence in a northwesterly direction along the summit of said range to the southwest corner of Fremont County ; thence in southwesterly direction along said range to the Cochetopa Pass ; thence on a produced southeasterly line to the mouth of the Canon of the Snowy Range, from whence flows the Rio Grande del Norte ; thence down the center of said stream to the place of beginning.

The act of the First General Assembly of 1861 creating Guadalupe County, afterward changed to Conejos, and the act of the Fifth General Assembly, approved Dec. 29, 1866, establishing the County of Saguache from Costilla County, were also by the Seventh General Assembly duly repealed.

It will be observed from the above contemporaneous acts that the counties of Conejos and Saguache had the two points, the "Cochetopa Pass" and the "mouth of canon of the Snowy Range from whence flows the Rio Grande del Norte," in common, and a common boundary between said points ; that in the case of Conejos it is given as a "northwesterly direction" from the latter to the former point, and called the "western boundary of Saguache County ;" and that in the case of Saguache County it is given as a "southeasterly direction" from the former to the latter point, the descriptions running to the right around each of the Counties.

Also that by this act, Cochetopa Pass was the extreme westerly limit of Saguache County. It also appears that, from Cochetopa Pass, the northern boundary of Conejos County followed in a southwesterly direction on the summit of the range to a point beyond the 107th degree of west longitude, and in no place passed to the south of said summit.

A reasonable construction of the language above quoted, defining the boundaries of the two Counties, would locate the "mouth of the canon of the Snowy Range" at some point on the Rio Grande River south and east of Cochetopa Pass ; and after a careful exami-

nation of ground and consideration of the circumstances, no more favorable point could be found than near the town of Del Norte at the base of the general range of mountains north and south, and where the waters of the Rio Grande River debouche on the plains of the San Luis Valley.

By reference to Thayer's map of Colorado, published in 1871, a copy of which is in the possession of Judge E. T. Wells, of Denver, it will be seen that the "mouth of the canon" is located at the base of the mountains in close proximity to the present town of Del Norte, and that the boundaries of the two Counties are mapped as herein indicated, and as shown by the accompanying tracing, which, while not conclusive, as the map was not official, is at least confirmatory of the conclusions herein set forth.

It might be further mentioned that the opinion of the Hon. Adair Wilson, for many years a resident of Del Norte, had much to do with the conclusions arrived at.

The location of the Cochetopa Pass and the La Loma Del Norte have not been disputed, and are conceded to be as shown on the map herewith presented.

By an act of the General Assembly, approved February 9, 1872, the boundaries of Saguache County were modified as follows :

Commencing at Poncha Pass, on its north boundary, and running "thence in a direct line west to the 107th degree of longitude; thence south, following said degree to the north boundary line of Conejos County; thence east along the north boundary line of Conejos County to where it intersects the southwest boundary of Saguache County."

The north line of Conejos, as heretofore defined, would be the summit of the range, following which east, would lead to Cochetopa Pass, where it would intersect the old boundary of Saguache, as established by the act of 1887, then called the "western" boundary, and by the act of 1872, called the "southwest boundary of Saguache County."

From Cochetopa Pass southeasterly, the boundary line is identical with that of the act of 1867, and the phraseology the same.

The effect of the act of 1872 was to add to Saguache County a triangular tract, bounded on the north by a line running due west from Poncha Pass to the 107th meridian of longitude, on the west by said meridian, and on the south by the summit of the range, extending from the 107th meridian to Poncha Pass; but nowhere can I find that any portion of the County, lying south of said range and west of Cochetopa Pass, has, by the acts above quoted, been made a part of said County.

Rio Grande and Hinsdale Counties were established by an act of the Legislature in 1874.

The boundary lines of Rio Grande County were, by said act, defined as follows:

"Commencing at a point where the ninth correction line north intersects the New Mexico first guide meridian east; thence north along said guide meridian to the point where it intersects the boundary line between the Counties of Costilla and Saguache; thence westerly along the southern boundary of Saguache County to the point where it intersects the New Mexico principal meridian; thence south along said principal meridian to the point where it intersects the ninth correction line north; thence east to the place of beginning."

"The boundary line between the Counties of Costilla and Saguache," referred to, is a line from the most easterly point of La Loma del Norte to the point where Mosco Creek enters into the San Luis Valley, indicated on tracing herewith by a broken line marked "line of 1867." From the intersection of this line with the first guide meridian east a westerly course "along the southern boundary of Saguache County" would lead directly to La Loma del Norte; thence up the center of the Rio Grande River to the mouth of the Canon of the Snowy Range as located at Del Norte; thence to Cochetopa Pass; thence southwesterly along the summit of the range to intersection with the New Mexico principal meridian, which, under the act of 1874, would constitute the northern boundary of Rio Grande County. Its west boundary would be the New Mexico principal meridian, from the intersection of said meridian with the summit of the range on the south line of Saguache County, south to the ninth correction line north.

A portion of the north boundary line of Rio Grande County was, later, modified by an act entitled "An Act

to strike off a portion of the County of Saguache and add the same to the County of Rio Grande," approved February 12, 1879, which reads as follows: "That all that portion of the County of Saguache situate south of a line commencing where the tenth correction line crosses the first guide meridian east, New Mexico principal meridian; thence west along said tenth correction line thirty miles; thence north on the west line of township forty north, range four east, six miles; thence directly west to the east line of Hinsdale County, be, and the same is hereby stricken off and added to the County of Rio Grande; *providing*, the requirements of the Constitution have been complied with."

The line above described runs partly through Saguache County and partly through Rio Grande County, that part in Rio Grande being indicated in the tracing herewith by a broken colored margin marked "Line described in Act of 1879." In the published maps of the State this line has been assumed to be the boundary between Rio Grande and Saguache Counties throughout its entire length; but I find nothing, in a reasonable construction of the Act, to warrant such an assumption. The Act does not recite that such line shall constitute the boundary between the two Counties, nor that any portion of Rio Grande County lying north of said line shall be stricken off and added to Saguache County. The line would, therefore, in my opinion, only operate as a boundary to the extent that it passed through Saguache County; and the effect of the Act would be to add to Rio Grande County all that part of Saguache County lying within the following described boundaries: Commencing at the intersection of the tenth correction line north with the New Mexico first guide meridian east; thence running west along said tenth correction line to the intersection of said line with a true line from the mouth of the Canon of the Snowy Range, as located at Del Norte, to Cochetopa Pass; thence southeasterly along said last described line to the mouth of said canon; thence down the center of the Rio Grande River to the most easterly point of the La Loma Del Norte; thence easterly along a true line, toward the point where Mosco Creek enters into the San Luis Valley, to the said guide meridian east; thence north along said guide meridian to the place of beginning.

The boundary lines of Hinsdale County, so far as they are under consideration, are described by the Act of 1874, as follows: "Commencing at the point of intersection of the ninth correction line north with the New Mexico principal meridian, and running thence north along said principal meridian to the southern boundary of Saguache County; thence westerly along the southern boundary of Saguache County to the 107th meridian of longitude west from Greenwich; thence north along said meridian to a point ten miles north of the thirty-eighth parallel of north latitude."

It will be observed from this and the former acts quoted that the Counties of Hinsdale and Saguache have a common boundary from the last mentioned point to the intersection of the New Mexico principal meridian with the southern boundary of Saguache County; that the southern boundary of Saguache County was established along the northern boundary of Conejos County, and that the northern boundary of Conejos County was located along the summit of the range running southwesterly from Cochetopa Pass. The conclusion is therefore warranted that the intersection last mentioned is at the summit of said range, and that the east boundary of Hinsdale County follows the New Mexico principal meridian north to said summit, as in the case of the west boundary of Rio Grande County.

Having, as we believe, fully set forth the various acts of the Legislature, bearing upon the boundaries under consideration, and our construction of them, following will be found the conclusions arrived at:

First. That for the purpose of affording a basis for the fixing and settlement of the boundary lines in question, and as, in the opinion of a majority of the Board of Surveyors, best harmonizing with the language and intention of the several legislative enactments, "The mouth of the Canon of the Snowy Range from whence flows the Rio Grande Del Norte," mentioned in the general statutes defining the boundaries of Conejos and Saguache Counties, was determined to be, and fixed, at the present town of Del Norte, in Rio Grande County; and more definitely at the intersection of the west boundary of the Del Norte town site produced north, with the center of the Rio Grande River; and that "The Cochetopa Pass" therein mentioned is situated

in the southwestern portion of Township 46 north, Range 4 east of the New Mexico principal meridian, on the Continental Divide, and where indicated by the topographical maps prepared by F. V. Hayden from U. S. surveys made in 1874-5, and further and more definitely located by the subdivisional survey of said Township, made in 1880, as being at the intersection of the wagon road with the line between the northeast and southeast quarters of section 30, in said township; and further that "La Loma del Norte" is a well-known bluff situated in Township 39 north, Range 7 east, of the New Mexico principal meridian, near its northwest corner.

Second. That the following was determined to be and established as the boundary line between Rio Grande and Saguache Counties, to wit: Commencing at the intersection of the first New Mexico guide meridian east with the tenth correction line north; thence west along said tenth correction line north to its intersection with a true line from "the mouth of the Canon of the Snowy Range" (to Cochetopa Pass), as above defined. Thence in a northwesterly direction along said true line (to Cochetopa Pass). Thence in a southwesterly direction along the summit of the Continental Divide to the intersection of said divide with the New Mexico principal Meridian; and that said boundary is fixed and defined:

1st—By the government monuments placed along the tenth correction line north.

2d—By the mouth of the Canon of the Snowy Range and Cochetopa Pass, above defined, as the extreme points of a true line between the same.

3d—By the Continental Divide constituting a continuous natural monument from Cochetopa Pass to the New Mexico principal meridian.

Third. That the boundary line between Hinsdale and Rio Grande Counties was determined to be, and was established, as commencing at the intersection of the ninth correction line north with the New Mexico principal meridian; thence following said meridian north to its intersection with the Continental Divide and to the southern boundary of Saguache County; and, that said boundary is fixed and defined by the monuments and

corners placed on the New Mexico principal meridian by the U. S. Government in the official survey of the same.

Fourth. That the boundary line between the Counties of Hinsdale and Saguache was determined to be, and established, as commencing on the southern boundary of Saguache County, at the intersection of the New Mexico principal meridian with said southern boundary of Saguache County, on the summit of the Continental Divide.

Thence westerly, following said Continental Divide to its intersection with the 107th meridian of west longitude. Thence north along said 107th meridian to a point ten miles north of the 38th parallel of north latitude; and that said boundary is fixed and defined,

1st—By the Continental Divide constituting a continuous natural monument from its intersection with the New Mexico principal meridian westerly to its intersection with the 107th meridian of west longitude. And

2d—By such monuments as have been established on the 107th meridian of west longitude in defining the eastern boundary of the old Indian reservation, and the boundaries of Gunnison and Saguache Counties, notably, at the northeast corner of Hinsdale County.

Respectfully submitted,

J. P. MAXWELL,

State Engineer.

J. J. ABBOTT,

County Surveyor Hinsdale County.

GEORGE T. NICKEL,

Deputy County Surveyor Rio Grande County.

SEEPAGE WATER.

Measurements for return or waste and seepage waters have been continued on the South Platte and Cache la Poudre rivers during the years 1891-1892. The observations have been taken in the month of October of each year, as heretofore. Unfortunately, for 1892 the measurements on the Platte were made on a rapidly falling stream immediately following a heavy storm. There being no uniformity of flow from one day to another, due to the intervening night, when measurements could not be taken, the results were entirely unreliable and no table was made of them.

In 1891 an excellent showing was made, the increase exceeding that of any previous year in which observations were made, due to more copious rains and a freer use of water in irrigation. The gain was found to be continuous from the Canon of the Platte to a point near Merino, a distance of 150 miles. Here a loss of 20.27 cubic feet per second occurred, which it is difficult to account for, as there is no evidence of unusual percolation into the sand bed of the river, unless an increased quantity was diverted into ditches immediately above after measurements of the same were made, and the decreased flow in the river had reached the station before measurement was made there, which was altogether probable.

Thence the gain continues to Iliff, the 175 mile point, where the greatest increase is found, being 611.76 cubic feet per second. Between this point and the eastern boundary of the State at Julesburg, a distance of fifty-one miles, a small loss occurs, which is accounted for by the sandy nature of the river bed. Nor can it be expected there would be any accession to the supply from a drainage of the adjoining lands, as there are no canals taken out east of Iliff and irrigation is not practiced.

This table, briefly summarized, shows as follows at Iliff:

Amount of water diverted from river by canals		883.16
Amount in river at Canon.....	204.35	
Less amount in river at Iliff.....	52.72	
	<hr/>	
	151.63	
Added amount of inflow from natural tributaries.....	119.77	
	<hr/>	
	271.40	271.40
	<hr/>	
Balance due to return by waste and seepage in second feet.....		611.76

The percentage of increase is 299.37, or practically three times the flow at South Platte canon. The average increase per mile is 3.24 second feet.

These measurements having been taken for each year, soon after the irrigation season was over, it was reasonable to assume that the results were larger than would be given some months later, or in the spring of the year. With a view of determining to what extent and with what uniformity this drainage from irrigation continued throughout the year, similar measurements were made in March, 1892, a table of which is herewith presented.

The work was prosecuted as far down the Platte as Fort Morgan, 123 miles, at which point an increase of 431.74 second feet is shown as against 472.14 feet in the previous October, the difference being about forty feet. The percentage of increase is 281.83, as against 212.45, the larger percentage being due to the smaller quantity carried in the river at the initial point in the March observations.

From an examination of the comparative table of increases it will be observed that the showing made in the March measurements compares very favorably with the October measurements of 1889-90, and the disparity is not great as compared with 1891.

The measurements of the Cache la Poudre river were made under the direction of Prof. L. G. Carpenter, of the department of "Irrigation Engineering," Colorado Agricultural College, co-operating with this department, the time corresponding to that of the Platte measurements, tables of which are herewith submitted.

The showing is not so favorable as for the same number of miles on the Platte, nor can this be expected, for the reason that a portion of the return waters from

some of the more extended Cache la Poudre canals find their way directly to the Platte channel, and it may be said also that the Platte receives directly the drainage from some of the ditches taking water out of Clear Creek, St. Vrain and Big Thompson Creeks.

It will be observed, however, that the accessions to the river supply from return water in October, 1891, correspond very closely with the amount in the following March of 1892, showing, so far as any deductions can be made from the limited observations, that the supply from this source is quite uniform.

TABLE OF MEASUREMENTS OF SEEPAGE WATER

IN THE SOUTH PLATE RIVER, COLORADO, OCTOBER 23 TO NOVEMBER 5, 1891.

NAMES OF STREAMS AND DITCHES WHERE MEASUREMENTS WERE TAKEN.	Amount of water in river.	Amount of water di- verted from river by canal.	Amount of inflow from natural trib- utaries.	Amount of water in river at points meas- ured, plus that di- verted by canals & — the inflow from natural tributaries.	Amount of increase in volume of river between points measured.	Decrease in volume of river between points measured.	Amount of increase in volume of river from the gauging station at Canon, to point where last gauged.	Per cent. of increase in volume from Canon, to point last measured.	Amount of increase per mile between points measured.	REMARKS.
South Platte River	204.35	---	---	---	---	---	---	---	---	{ Above Dam of High Line Canal
High Line Canal	---	99.10	---	---	---	---	---	---	---	---
Platte Canon Ditch	---	49.39	---	---	---	---	---	---	---	In underground works
The Citizens' Water Co.	---	8.00	---	---	---	---	---	---	---	---
Last Chance Ditch	---	0.20	---	---	---	---	---	---	---	---
City Ditch	---	29.07	---	---	---	---	---	---	---	---
South Platte River	46.16	---	---	231.92	27.57	---	27.57	13.45	6 M=4.93	Below City Ditch
Plum Creek	---	---	2.98	---	---	---	---	---	---	---
Nevada Ditch	---	16.89	---	---	---	---	---	---	---	---
South Platte River	84.86	---	---	284.53	53.61	---	80.18	39.24	6 M=8.93	At Littleton
So. Denver Water Works	---	2.32	---	---	---	---	---	---	---	---
Bear Creek	---	---	7.26	---	---	---	---	---	---	---

American Water Co.	21.54	5.59	300.73	16.20	96.38	47.15	10 M=1.62	At all pumping stations
Cherry Creek								
South Platte River	90.05			16.20	96.38	47.15	10 M=1.62	At foot 16th st., Denver
Burlington Ditch								
Clear Creek	53.98	1.04						
South Platte River	79.58		343.20	42.47	138.85	67.94	11 M=3.86	Below Fulton Ditch
Brantner Ditch	29.98							
Brighton Ditch	11.98							
South Platte River	73.96		379.54	36.34	175.19	85.24	7 M=5.19	Below Brighton Ditch
Platteville Ditch		6.04						
Evans No. 2 Ditch	21.14							
South Platte River	90.28		423.04	43.50	218.69	107.01	9 M=4.83	Below Ryans No. 2 D'ch
Meadow Isl'd Ditch No. 1		2.09						
Side Hill Ditch		6.50						
Meadow Island No. 2		6.41						
Beaver Lake Ditch	14.27							
Farmers Indep't Ditch	58.16							
South Platte River	11.09		431.23	8.14	226.93	111.05	7 M=1.16	Below Farm's Ind. D'ch
South Platte River	17.48		437.67	6.39	233.32	114.12	5 M=1.29	Above St. Vrain Creek
St. Vrain Creek		28.94						
Union Ditch								
Big Thompson Creek	37.48	12.85						

South Platte River	134.81	---	---	676.76	38.36	---	472.41	231.17	9 M=4.37	{ Below Platte and Beaver Ditch
Platte and Beaver Supply Ditch	---	46.21	---	---	---	---	---	---	---	---
South Platte River	186.79	---	---	774.95	98.19	---	570.60	279.22	14½ M=6.77	{ Above Smith Ditch at Snyder
Smith Ditch	---	1.36	---	---	---	---	---	---	---	---
Edwards Ditch	---	18.27	---	---	---	---	---	---	---	---
South Platte Ditch	---	35.51	---	---	---	---	---	---	---	---
Pawnee Ditch	---	64.70	---	---	---	---	---	---	---	---
South Platte River	46.68	---	---	754.68	---	20.27	550.33	269.30	{ 17½ M= Loss, 1.16	Above Merino
Schneider Ditch	---	3.46	---	---	---	---	---	---	---	---
Springdale Ditch	---	9.85	---	---	---	---	---	---	---	---
South Platte River	66.73	---	---	788.04	33.36	---	583.69	285.63	13 M=2.59	At Sterling
Smith & Henderson Ditch	---	6.74	---	---	---	---	---	---	---	---
Low Line Ditch	---	2.12	---	---	---	---	---	---	---	---
Iliff and Platte Valley Ditch	---	33.22	---	---	---	---	---	---	---	---
South Platte River	52.72	---	---	816.11	28.07	---	611.76	299.37	9 M=3.12	At Iliff
South Platte River	39.65	---	---	803.04	---	13.07	598.69	292.97	{ 15 M= Loss, 0.87	Two miles above Crook
South Platte River	47.70	---	---	811.09	8.05	---	606.74	296.91	20 M=0.42	Below Sedgewick
South Platte River	42.96	---	---	806.35	---	4.74	602.00	294.59	{ 16 M= Loss, 0.29	At Julesburg
Totals	---	883.16	119.77	---	---	---	---	---	---	Average increase per Mile=3.24

Bear Creek							12.64										{ At all Pumping Stations.
Lee Gulch							0.85										
American Water Co.																	
Cherry Creek							5.03										{ At foot of Sixteenth street, Denver
South Platte River	284.22							282.75	59.61		129.56	84.57		10 M=5.96			
Burlington Ditch																	
Glar Creek							68.36										{ Below head of Fulton Ditch
South Platte River	297.28							294.70	11.95		141.51	92.37		11 M=1.09			
South Platte River	272.44							269.86			24.84	76.16		7 M=loss 3.55			--At Brighton Bridge
Dry Creek							1.49										
South Platte River	292.59							289.52	19.66		136.33	88.99		8 M=2.46			Opposite Fort Lupton
Buckers' Ditch							4.03										
Farmers' Indep'd't Ditch							1.55										
South Platte River	332.22							333.73	44.21		180.54	117.86		7 M=6.32			Opposite Plattenville
St. Vrain Creek							70.99										
Big Thompson Creek							34.71										
Evans' Ditch No. 1							0.96										
Dry Creek							0.50										
South Platte River	449.78							346.05	12.32		192.86	125.54		17 M=0.72			--At Evans Bridge
South Platte River	473.09							369.36	23.31		216.17	141.11		6 M=3.88			{ Above mouth Cache la Poudre River
Cache la Poudre River							145.56										
South Platte River	687.73							438.44	69.08		285.25	186.27		10 M=6.908			{ One-half mile below Hardin

MEASUREMENT OF RETURN WATERS OF CACHE LA POUDRE RIVER, OCTOBER, 1891.

MEASUREMENT MADE BY DEPARTMENT OF IRRIGATION ENGINEERING, COLORADO AGRICULTURAL COLLEGE, CO-OPERATING WITH STATE ENGINEER. OCTOBER, 1891.

NAMES OF STREAMS AND DITCHES WHERE MEASUREMENTS WERE TAKEN	Amount of water in river.	Amount of water di- verted from river by canals.	Amount of inflow from natural tribu- taries.	Amount of water in river at points meas- ured, plus that di- verted by canals & — the inflow from natural tributaries.	Amount of increase in volume of river between points measured.	Decrease in volume of river between points measured.	Amount of increase in volume of river from the gauging station at Canon, to point where last gauged.	Per cent. of increase in volume from gauging station at Canon to point last measured.	Amount of increase per mile between points measured.	REMARKS.
Cache la Poudre River	97.58	---	---	---	---	---	---	---	---	
Canon Ditch	---	0.03	---	---	---	---	---	---	---	
Taylor & Gill Ditch	---	2.16	---	---	---	---	---	---	---	
Little Cache la Poudre Ditch	---	5.21	---	---	---	---	---	---	---	
Larimer County Ditch	---	1.00	---	---	---	---	---	---	---	
Fort Collins Water Works	---	0.30	---	---	---	---	---	---	---	
Pleasant Valley and Lake Canal	---	6.99	---	---	---	---	---	---	---	
Larimer County, No. 2, Canal	---	0.64	---	---	---	---	---	---	---	
Larimer and Weld Canal	---	43.30	---	---	---	---	---	---	---	
Cache la Poudre River	54.39	---	114.02	---	16.44	---	16.44	16.85	8 M=2.05	{ Below head of Larimer & Weld Canal.
Josh Ames Ditch	---	0.50	---	---	---	---	---	---	---	
Lake Ditch	---	0.24	---	---	---	---	---	---	---	

MEASUREMENT OF RETURN WATERS OF CACHE LA Poudre RIVER—Concluded.

NAMES OF STREAMS AND DITCHES WHERE MEASUREMENTS WERE TAKEN.	Amount of water in river.	Amount of water di- verted from river by canals.	Amount of inflow from natural tribu- taries.	Amount of water in river at points meas- ured, plus that di- verted by canals & the inflow from natural tributaries.	Amount of increase in volume of river between points measured.	Decrease in volume of river between points measured.	Amount of increase in volume of river from the gauging station at Canon to point where last gauged.	Per cent. of increase in volume from gauging station at Canon to point last measured.	Amount of increase per mile between points measured.	REMARKS.
Coy Ditch.....	---	1.60	---	---	---	---	---	---	---	---
Box Elder Ditch.....	---	3.78	---	---	---	---	---	---	---	---
Cache la Poudre Canal No. 2.....	---	0.50	---	---	---	---	---	---	---	---
Cache la Poudre River..	56.48	---	---	122.73	8.71	---	25.15	25.77	18 M=0.49	{ At head of Cache la Poudre No. 2 Canal.
Eaton Ditch.....	---	1.42	---	---	---	---	---	---	---	---
Union Colony Ditch..	---	32.24	---	---	---	---	---	---	---	---
Boyd & Freeman Ditch..	---	2.42	---	---	---	---	---	---	---	---
Cache la Poudre River..	15.30	---	---	117.63	---	5.10	20.05	20.54	19 M=loss 0.26	{ Opposite Greeley pump house.
Cache la Poudre River..	53.56	---	---	155.89	38.26	---	58.31	59.65	2 M=19.13	Below Greeley
Ogilvy Ditch.....	---	18.12	---	---	---	---	---	---	---	---
Waste from Ogilvy Ditch	---	---	5.88	---	---	---	---	---	---	---
Cache la Poudre River..	60.72	---	---	175.29	19.40	---	77.71	79.63	6 M=3.23	{ At Junction with So. Platte River.
Totals.....	---	120.45	5.88	---	---	---	---	---	---	---

RETURN WATERS OF CACHE LA POUDDRE RIVER, COLORADO.

MEASUREMENT MADE BY L. G. CARPENTER, PROFESSOR OF IRRIGATION ENGINEERING, MARCH, 1892.

NAMES OF STREAMS AND DITCHER WHERE MEASUREMENTS WERE TAKEN.	Amount of water in river.	Amount of water di- verted from river by canals.	Amount of inflow from natural trib- utaries.	Amount of water in river at points meas- ured, plus that di- verted by canals & the inflow from natural tributaries.	Amount of increase in volume of river between points measured.	Decrease in volume of river between points measured.	Amount of increase in volume of river from the gauging station at Canon, to point where last gauged.	Percent of increase in volume from gauging station, at Canon, to point last measured.	Amount of increase per mile between points measured.	REMARKS.	{ At Canon Gauging Station.
Cache la Poudre River.	65.02	---	0.50	---	---	---	---	---	---	---	---
New Stone Creek	---	---	---	---	---	---	---	---	---	---	---
Pleasant Valley and Lake Canal	---	4.38	---	---	---	---	---	---	---	---	---
Jackson Ditch	---	2.07	---	---	---	---	---	---	---	---	---
Little Cache la Poudre Canal	---	1.08	---	---	---	---	---	---	---	---	---
Taylor & Gill Ditch	---	0.59	---	---	---	---	---	---	---	---	---
Pt. Collins Water Works	---	0.22	---	---	---	---	---	---	---	---	---
Larimer County No. 2 Ditch	---	10.10	---	---	---	---	---	---	---	---	---
New Mercer Ditch	---	0.28	---	---	---	---	---	---	---	---	---
Larimer & Weld Canal	---	0.72	---	---	---	---	---	---	---	---	---
Box Elder Ditch.	---	0.75	---	---	---	---	---	---	---	---	---
Eaton Ditch	---	0.10	---	---	---	---	---	---	---	---	---

RETURN WATERS OF CACHE LA POUDDRE RIVER, COLORADO.—*Concluded.*

NAMES OF STREAMS AND DITCHES WHERE MEASUREMENTS WERE TAKEN.	Amount of water in river.	Amount of water di- verted from river by canals.	Amount of inflow from natural tribu- taries.	Amount of water in river at points meas- ured, plus that di- verted by canals & — the inflow from natural tributaries.	Amount of increase in volume of river between points measured.	Decrease in volume of river between points measured	Amount of increase in volume of river from the gauging station at Canon, to point where last gauged.	Per cent. of increase in volume from gauging station at Canon to point last measured.	Amount of increase per mile between points measured.	REMARKS.
Whitney Ditch.....	---	0.06	---	---	---	---	---	---	---	{ Near head of Eaton Ditch.
Cache la Poudre River.....	102.54	---	---	122.39	57.37	---	57.37	88.23	30 M=1.91	
Near Fuller Bridge.....	---	---	1.15	---	---	---	---	---	---	{ Near Greeley Pump Station.
Cache la Poudre River.....	132.75	---	---	152.45	29.06	---	87.43	134.47	15 M=1.96	
Ogilvy Ditch.....	---	1.00	---	---	---	---	---	---	---	
Cache la Poudre River.....	141.49	---	---	161.19	9.74	---	96.17	147.91	3 M=3.24	Below Ogilvy Ditch.
Cache la Poudre River.....	145.56	---	---	165.26	4.07	---	100.24	154.17	3 M=1.36	At mouth.
Totals.....	---	21.35	1.65	---	---	---	---	---	---	

COMPARATIVE TABLE

SHOWING THE INCREASE IN VOLUME OF THE SOUTH PLATTE RIVER,
AND RETURN OF WASTE OR SEEPAGE WATER.

PLACES WHERE MEASUREMENTS WERE TAKEN.	Amount of increase in volume of river, from the Canon to point where measured, mi- nus the inflow from natural tributaries.			
	October 1889.	October 1890.	October 1891.	March 1892.
River below head of City Ditch.	-----	-----	27.57	25.32
River at Littleton	49.91	11.73	80.18	69.95
River at Denver	50.91	55.61	96.38	129.56
River below head of Fulton Ditch	-----	94.41	138.85	141.51
River at Brighton	77.07	98.91	175.19	116.17
River below Elwood & Wheeler Ditch	119.10	172.35	218.69	136.33
River at Platteville	133.38	-----	226.93	180.54
River above mouth of St. Vrain	-----	155.80	233.32	-----
River below Latham Ditch	197.00	176.91	299.21	192.86
River above Cachela Poudre R'vr	-----	215.20	326.13	216.17
River below Hardin Ditch	277.10	351.66	392.66	285.25
River below Putman Ditch	-----	333.60	418.86	330.61
River above Orchard	276.13	356.79	-----	-----
River above Fort Morgan Canal	305.92	360.58	434.05	360.09
River above head of Platte and Beaver Canal	307.03	367.09	472.14	431.74
River above head of Smith Ditch at Snyder	-----	384.18	570.60	-----
River at Merino	385.54	405.71	550.33	-----
River at Sterling	418.33	435.16	553.69	-----
River 2 miles above Iliff	422.77	449.21	611.76	-----

CHAPTER II.

IRRIGATION DIVISION NO. 1.

SOUTH PLATTE DIVISION.

Mr. I. H. Batchellor, Superintendent. Appointed April 23, 1889. Reappointed July 18, 1891. Residence, Denver, Colorado.

Mr. Batchellor's concise report upon the workings of his division, which follows, requires little comment or elaboration.

The total area irrigated, as shown by the statements from ten districts, is 763,105 acres, which, as compared with 693,372 acres reported from the same districts in 1890, gives an increase of 69,733 acres.

Four districts are not included in this summary, three (Nos. 46, 47, 48) embraced in North Park, which have a combined record of 265 ditches, and the fourth (No. 65), embracing the north and middle forks of the Republican River, where there is a record of fourteen ditches.

Total miles ditch line reported, 2,651.54, covering 882,853 acres of land. The average amount of water reported as carried in the ditches of some of the districts is undoubtedly too high, as the sources of supply would not furnish the water. However, taking the total average amount carried as given (5,103 cubic feet per second) and the number of acres supplied therefrom, to wit: 678,620, and a duty is given to the water of 130 acres to each second feet.

In order to abridge the report as much as practicable, and yet give the general information desired, the statistical statements of the Water Commissioners will not be published, but the summarized statement of the Superintendent will show the totals from each district under the respective headings and the number of ditches in each district carrying water, as shown by the Commissioners' reports.

The ditch and reservoir statements, filed in the office of the State Engineer, during the years of 1891-1892, are given under the headings of their respective districts.

HON. J. P. MAXWELL,
State Engineer,
Denver, Colo.

I herewith hand you a condensed tabulated statement of the reports of the Water Commissioners, for the districts comprising the Division of the Platte, for the year 1892 (the information for 1891 being so meager that it is impossible to make a correct report for that year).

This has been a very favorable year for farmers, gardeners and fruit growers, having been ample water in the streams nearly the whole season, supplemented by late rain. The crops were nearly all (if not all) matured.

District No. 1. James Hurly, Commissioner for District No. 1, reports 43,730 acres irrigated, being 26,950 acres more than 1890. There has been a good flow of water in this district, which must be largely due to seepage, as the Platte, as well as other streams above Greeley, were drawn dry to furnish water for the districts through which they run.

Mr. Hurley says he "has a great deal of trouble to get the ditch owners and superintendents to furnish data for reports." Has been on duty forty-one days to date (September 28).

District No. 2. J. H. Hodgson, Commissioner for District No. 2, reports 58,328 acres irrigated, 7,322 in excess of 1890. Was called out to distribute water on the 20th day of April. Had good supply until August 1. More than average crops were secured.

The manager of the Evans Ditch, No. 2, made complaint that the Bucker Ditch Company had constructed what they called a seepage ditch up through the Platte bottom "and several miles above the head of their own ditch and excavated about two feet below the channel of the river, a clear encroachment upon other ditches' rights" I called Mr. Hodgson's attention to it and he immediately shut it off, but other parties claimed and re-

moved the gate between the seepage and Bucker ditches, and thereby left the Commissioner powerless.

District No. 3. J. L. Armstrong, Commissioner District No. 3, reports 162,239 acres irrigated, 3,959 acres of seepage, and 17,750 acres from reservoirs, being 12,192 more more than 1890.

District No. 4. W. A. Bean, Commissioner District No. 4, gives 101,907 acres irrigated, 1,500 acres by seepage and 10,840 as from reservoirs, making 12,117 acres more than 1890. As no complaints have come from this district, it is reasonable to suppose that the water supply was good.

District No. 5. From District No. 5 we get 77,803 acres irrigated, being 16,762 acres less than 1890. Mr. J. W. Daniels, Commissioner, says that he is "convinced that reports made in former years are erroneous," which must account for the falling off of acreage in that district.

District No. 6. A. C. Stillwell, Commissioner of District No. 6, reports 74,779 acres irrigated, 2,903 less than 1890, 1,400 by seepage. "I was called out April 25, and was employed up to date (October 1), seventy days, and an assistant sixty days, second assistant on reservoirs twenty-two days. The stream kept up to a later date than usual owing to less heavy rains in the mountains allowing the snow to melt more gradually.

"Farmers are very slack about keeping up their head-gates and rating flumes.

I would suggest that the tax schedule of each County of the State be so arranged that the number of acres of the different crops could be placed thereon, and the name of the ditch given from which they were irrigated.

"It would be but very little additional work for the Assessors and would save a vast amount of time on the part of the Water Commissioners."

District No. 7. M. J. Clark reports fifty-one ditches (eighty-six being the whole number decreed) as irrigating 108,487 acres, 3,810 acres more than 1890, 2,670 by seepage. In this district much attention has been given to fruit cultivation, with good success, as I have been informed, but as no report is made of it by the Commissioners there is no basis to make an estimate of the products.

The injunction which prohibits me from performing my duty according to the law enacted by the Legislature is still in force, notwithstanding the decision of the Supreme Court in several similar cases to the contrary.

District No. 8. D. W. Stevens, Commissioner District No. 8, reports 39,472 acres irrigated, being 20,115 more than 1890. 700 acres by seepage. The excess of this year over 1890 is accounted for by the fact that the former Commissioners did not understand that that portion of the Northern Colorado Irrigating Company's ditch, which lies north of Cherry Creek, was in their district, and consequently did not report the land lying under it.

District No. 9. Frank Ewers, Commissioner District No. 9, reports 4,573 acres irrigated by ditches, and 5,674 by reservoirs, being 2,135 acres over 1890.

It will be seen by the above that over one-half the land in this district is irrigated by stored water. Bear Creek, which furnishes the water, is only a small stream, but with a good system of reservoirs and due diligence in securing the water, full crops are generally secured.

Mr. Ewers complains of the lack of rating flumes and head-gates, there being but one of the former in the district.

District No. 23. The Commissioner for District No. 23, M. R. Hanlin, for some (to me) unknown reason made no report, but I have substituted that of 1891, which shows 75,681 acres irrigated, 75,542 of which was natural grass.

District No. 46. District 46 has had no adjudication of water rights. The Commissioner, C. F. Staples, reports an abundance of water through the whole irrigating season.

District No. 47. This District has had no water rights granted by the courts. W. D. Beckwith, the Commissioner, reports plenty of water and no complaints. Hay crop unusually good. Some trials of timothy have proved a fair success, also winter rye and oats with results that both can be raised at this altitude (8,300 feet).

District No. 48. No adjudication or Water Commissioner.

District No. 64. R. J. Patterson, Commissioner District No. 64, reports 11,875 acres irrigated, which is 915 acres more than 1890.

This district is the last on the Platte River in the State, and being a long distance from the source of supply, with all the water drawn from the river and its feeders during the latter part of the irrigating season, the question arises, where do they get water for irrigation? It has been satisfactorily demonstrated that a large portion of the water used sinks into the earth and finds its way back to the stream lower down, arising to the surface, and flowing on as if nothing had happened. Therefore, people living on the lower Platte River need have no fear of shortage, with nine districts above them forming immense underground reservoirs.

With the help of occasional rains this district has secured good crops.

District No. 65. No decrees and no Commissioner.

As shown by the tabulated statement, there were 11,474 acres of land irrigated by seepage water in districts near the mountains, which, considered in connection with districts further down the streams, it must certainly supply an unlimited amount continuously.

Districts Nos. 3, 4 and 9 report an aggregate of 34,264 acres of land which was irrigated from stored waters.

The above figures most certainly represent but a small part of the land irrigated thereby, for many large reservoirs are known to be constructed and in use in Districts No. 2, 5, 6 and 7, but as no reports are made by the Commissioners I have no data to work upon.

[illegible]

*Water rights not adjudicated.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 1, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER JAMES HURLEY, ORCHARD, COLO., APPOINTED IN 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in the State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Banner Ditch, No. 1.....	Box Elder creek.....	May 1, 1891	Jan. 31, 1891	262.40	Banner Ditch and Reservoir Co. A. M. Fahringer, <i>et als</i>
The Banner Ditch, No. 2.....	Box Elder creek.....	May 1, 1891	Feb. 10, 1891	130.00	
The Bennett Ditch.....	Kiowa creek.....	June 1, 1891	Apr. 18, 1891	40.00	
The Lone Tree Ditch and Reservoir Company's Ditch West from Dam.....	Box Elder creek.....	June 2, 1891	Not stated.	Not given	Lone Tree Ditch and Reservoir Co.
The Lone Tree Ditch and Reservoir Company's Ditch East from Dam.....	Box Elder creek.....	June 2, 1891	Not stated.	Not given	
The Wolf Creek Ditch.....	Wolf and Comanche creeks.....	June 22, 1891	June 19, 1891	200.00	
The Oscar Sherrer Ditch.....	A well.....	June 25, 1891	June 1, 1891	6.00	Henry N. Bellows Mrs. Frank Sheffer
The Bijou Ditch.....	Bijou creek.....	July 18, 1891	Apr. 27, 1891	65.00	Chas. S. Owens
The C. E. Kuhn Ditch.....	Beaver creek.....	Oct. 14, 1891	July 15, 1889	2.90	C. E. Kuhn
The East Bijou Ditch.....	East Bijou creek.....	Oct. 14, 1891	July 18, 1891	400.00	Adams H. Fahringer Geo. H. and Ida E. Raymond
The Middle Bijou Big Ditch.....	Middle Bijou creek.....	Oct. 14, 1891	July 18, 1891	400.00	
The West Bijou Ditch.....	West Bijou creek.....	Oct. 14, 1891	July 18, 1891	400.00	
The Comanche Big Ditch.....	Comanche creek.....	Oct. 14, 1891	July 18, 1891	400.00	

The Kiowa Big Ditch.....	Kiowa creek.....	Oct. 14, 1891	July 18, 1891	400.00	Adams H. Fahringer
The Wolf Big Ditch.....	Wolf creek.....	Oct. 14, 1891	July 18, 1891	All of Wolf creek	Geo. H. and Ida E. Raymond
The Lawless Underflow.....	West Bijou creek.....	Nov. 18, 1891	Aug. 20, 1891	50.00	
The Lawless Ditch.....	West Bijou creek.....	Nov. 18, 1891	Oct. 28, 1891	100.00	Mary Lawless
The Extension of the Page and Foster Ditch.....	Bijou creek.....	Dec. 8, 1891	Oct. 26, 1891	50.00	
The Wolf Creek Ditch.....	Wolf creek.....	Jan. 16, 1892	Dec. 15, 1891	200.00	Henry N. Bellows <i>et al</i>
The Lone Tree Ditch and Reservoir Company's Ditches.....	Box Elder creek.....	Feb. 3, 1892	Plat only.	-----	
The Lone Tree Ditch and Reservoir Co.'s Ditch No. 2.....	Box Elder creek.....	Feb. 11, 1892	Jan. 19, 1891	1,200.00	
The Lone Tree Ditch and Reservoir Co.'s Ditch No. 3.....	Box Elder creek.....	Feb. 11, 1891	Jan. 19, 1891	1,500.00	The Lone Tree Ditch and Reservoir Co.
The Lone Tree Ditch and Reservoir Co.'s Ditch No. 5.....	Box Elder creek.....	Feb. 11, 1891	Jan. 19, 1891	50.00	
The John H. O'Connor's Ditch or Cut.....	First creek.....	Feb. 15, 1892	Dec. 11, 1888	240.00	John H. O'Connor
The Bramkamp East Ditch.....	Deer Trail creek.....	May 14, 1892	Feb. 15, 1892	3.21	William Bramkamp
The Bramkamp West Ditch.....	Deer Trail creek.....	May 14, 1892	Feb. 15, 1892	3.21	
The David Howard Ditch.....	Box Elder creek } and Cottonwood } Gulch.....	Aug. 11, 1892	Feb. 1, 1890	12.00	David Howard
The William B. Miller Ditch.....	Box Elder creek.....	Aug. 11, 1892	Aug. 3, 1892	12.00	William B. Miller
The Fort Morgan Land and Reservoir Co.'s Canal.....	South Platte R. } and Kiowa and } Bijou creeks.....	Sept. 3, 1892	Sep. 1, 1892	450.00	The Fort Morgan Land and Reservoir Company
The Clinton Ditch.....	Deer Trail creek.....	Sept. 12, 1892	July 11, 1892	9.80	Clinton W. Weatherbee
The Gibson Ditch No. 2.....	Kiowa creek.....	Oct. 11, 1892	July 14, 1892	165.00	J. W. Gibson

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 1, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Bunker & Coggin's Reservoir	Little Crow Creek	Built on stream.	Dec. 2, 1890	Nov. 12, 1890	12,000,000	Bunker & Coggin's.
The Banner Reservoir No. 1	Box Elder Creek	Banner Ditch No. 1	May 1, 1891	Not Stated	17,289,000	The Banner Ditch & Reservoir Company.
The Banner Reservoir No. 2	Box Elder Creek	Banner Ditch No. 1	May 1, 1891	Not Stated	20,217,000	
The Bennett Reservoir	Kiowa Creek	Bennett Ditch	June 1, 1891	April 18, 1891	Not given	A. H. Fahringer <i>et al.</i>
The Lone Tree Ditch and Reservoir Co's West Reservoir	Box Elder Creek	Ditch west from dam	June 2, 1891	-----	Not given	Lone Tree Ditch & Reservoir Company.
Same, East Reservoir	Box Elder Creek	Ditch east from dam	June 2, 1891	Not Stated	Not given	
The Comanche Reservoir	Wolf & Comanche Creeks	Wolf Creek Ditch	June 22, 1891	June 19, 1891	Not given	Henry N. Bellows <i>et al.</i>
The L. A. Watkins Reservoir	Station and Trout Gulches	Built on stream	June 30, 1891	Dec. 22, 1891	1,882,000	Leonard A. Watkins.
The Bijou Reservoir	Bijou Creek	Bijou Ditch	July 18, 1891	April 22, 1891	10,000,000	Chas. S. Owens.
The Bare Gulch Reservoir	Bare Gulch	Built on stream.	Aug. 10, 1891	May 22, 1891	535,000	Leonard A. Watkins
The Enterprise Reservoir	Not given	Built on gulch	Aug. 10, 1891	May 22, 1891	1,425,000	
The Ft. Morgan Ditch & Reservoir Co's Reservoir No. 1.					36,000,000	
The Ft. Morgan Ditch & Reservoir Co's Reservoir No. 2	Bijou Creek	Inlet or supply Ditch	Sep. 19, 1891	June 5, 1891	150,000,000	The Fort Morgan Ditch and Reservoir Company.
The Ft. Morgan Ditch & Reservoir Co's Reservoir No. 3.					30,000,000	

The Ft. Morgan Ditch & Reservoir Co.'s Reservoir No. 4	Bijou Creek	Inlet or supply Ditch.			175,000,000	The Fort Morgan Ditch and Reservoir Company.
The Ft. Morgan Ditch & Reservoir Co.'s Reservoir No. 5	{ East and Middle Bijou Creeks.	{ East and Middle Bijou Ditches			900,000,000	
The Ft. Morgan Ditch & Reservoir Co.'s Reservoir No. 6	West Bijou Creek	West Bijou Ditch	Aug. 1, 1891		140,000,000	
The Middle Bijou Reservoir	{ Kiowa, Comanche and Wolf Creeks.	{ Kiowa, C'm'uch & Wolf Creek Big Ditches	Aug. 2, 1891		548,856,000	Adams H. Fahringer, Geo. H and Ida E. Raymond.
The West Bijou Reservoir	Kiowa Creek	Kiowa Big Ditch	Sep. 5, 1891		304,820,000	
The Kiowa Reservoir	West Bijou Creek	Lawless Ditch	Sep. 5, 1891		21,780,000	
The Little Kiowa Reservoir	West Bijou Creek	Paige & Foster Ditch through the extension of same	Oct. 23, 1891		2,289,000	Mary Lawless
The Lawless Reservoir	Bijou Creek	Wadlin Ditch	Oct. 26, 1891		4,275,000	Mary Lawless
The Lawless Reservoir No. 1.	Crow Creek	Wolf Creek D'ch	Not Stated.		{ 44,000,000 as enlarged	John M. G. Wadlin
The Lawless Reservoir No. 2	Wolf Creek	Built on stream.	Dec. 15, 1891		Not Given	Henry N. Bellows <i>et al</i>
Amended statement of the Wadlin Reservoir	Crow Creek	Co.'s Ditch No. 3	Oct. 5, 1891		157,000	Daniel Camfield
The Comanche Reservoir No. 1	Crow Creek	Co.'s Ditch No. 1	Jan. 16, 1892		{ 20,908,000	The Lone Tree Ditch and Reservoir Company
The Camfield Reservoir	Box Elder Creek	Built on stream	Jan. 28, 1892		7,396,000	William Bramkamp
The Lone Tree Ditch & Reservoir Co.'s Reservoir No. 1.	Deer Trail Creek	Built on stream	Feb. 11, 1891		5,197,000	
The Lone Tree Ditch & Reservoir Co.'s Reservoir No. 2	Walker Gulch	Built on stream	May 14, 1892		{ 3,251,000	J. W. Gibson
The Bramkamp Reservoir	Coolehan Gulch	Built on stream	Oct. 11, 1892		12,853,000	
The Gibson Reservoir No. 1	Hoffer Gulch	Built on stream			16,324,000	
The Gibson Reservoir No. 2						
The Gibson Reservoir No. 3						

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 2, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892—COMMISSIONER JOS. H. HODGSON, DENVER, COLO., APPOINTED JULY, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Frank Ditch	Station gulch.....	March 7, 1891	Mar. 15, 1890	0.56	Fred F. Frank
The L. A. Watkins Ditch No. 1 ..	Station creek	March 7, 1891	Dec. 20, 1890	3.00	L. A. Watkins
The L. A. Watkins Ditch No. 2 ..	Station creek	March 7, 1891	Dec. 20, 1890	3.00	
The L. A. Watkins Ditch No. 3 ..	Station creek	March 7, 1891	Dec. 20, 1890	3.00	
The Albee & Warden Ditch	South Platte river.	June 3, 1891	May 11, 1891	20.00	A. C. Albee
The Fulton Development & Supply Ditch.....	Subterranean, sec- page & sp'g wat }	June 11, 1891	March 1, 1890	212.00	Geo. W. Twombly <i>et al</i>
The Burlington Development & Supply Ditch.....	Same sources	July 6, 1891	Jan. 17, 1891	63.60	
The Reno & Stanley Ditch	Dry creek.....	Feb. 3, 1892	Oct. 28, 1891	2.00	
The Sacramento Ditch.....	South Platte river.	April 6, 1892	Jan. 15, 1892	8.00	Thomas T. Reno Wall & Purcell
The Leonard Ditch	Murphey creek	April 16, 1892	April 4, 1892	20.00	J. H. Leonard
The McCanne Ditch	South Platte river.	Aug. 3, 1892	Mar. 15, 1892	20.00	D. J. McCanne

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 2, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of Ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Dodge Reservoir	Dry Creek	German Ditch	Mar. 27, 1891	July 1, 1888	3,310,000	John K. Dodge
The Second Creek Reservoir	South Platte River	Burlington Ditch	May 15, 1891	April 3, 1891	4,573,800	Chas. E. Day <i>et al.</i>
The Twombly Reservoir No. 1,					{ 25,000,000 }	
The Twombly Reservoir No. 2,						
The Twombly Reservoir No. 3,	South Platte River	Fulton Ditch	June 11, 1891	June 9, 1891	{ 2,500,000 }	Geo. W. Twombly
The Irondale Ditch and Reservoir Company's Reservoir	Long Branch	Comp'y's Feeder	July 11, 1891	April 13, 1891	45,000,000	{ The Irondale Ditch and Reservoir Co.
The Draper Reservoir	South Platte River	Burlington Ditch & Brighton Lat	July 23, 1891	June 3, 1891	522,720	Not given
The Little Western Reservoir	South Platte River	Burlington Ditch	Oct. 19, 1891	May 2, 1891	5,500,000	Olive O. Nye
The Evans Reservoir No. 1	{ Ravines in Sec. 10, T. 3 N, R. 68 W }	Built on streams	Nov. 16, 1891	{ Nov. 1890 Nov. 12, 1891 }	{ 2,613,600 5,227,200 }	Eli I. Evans
The Evans Reservoir No. 2		South Platte River	Feb. 15, 1892	Feb. 20, 1890	13,068,000	J. A. Manfull <i>et al.</i>
The Kalooga Reservoir, Amended Statement		Burlington Ditch	Mar. 17, 1892	Mar. 11, 1892	4,000,000	Joel F. Vaile

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 3, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DEC. 1, 1890, TO DEC. 1, 1892.—COMMISSIONER J. L. ARMSTRONG, FT. COLLINS, COLORADO. APPOINTED JULY, 1890.

NAME OF DITCH OR CANAL.	Name of Stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Sickman & Davy Ditch.....	Dry Creek.....	Dec. 9, 1890	June 15, 1889	4.28	Thomas H. Davy and Jonathan Sickman
The Gibson Ditch.....	Dry Creek.....	Dec. 18, 1890	Nov. 15, 1890	15.38	A. O. Gibson
The Lambert Lateral.....	Cache la Poudre.....	Jan. 3, 1891	Mar. 1, 1890	30.00	John Lambert, <i>et al</i>
The Arthur Irrigating Co. Feeder	Marsh.....	Jan. 8, 1891	Oct. 14, 1890	6.16	The Arthur Irrigation Company
Same No. 2.....	Marsh.....	Jan. 8, 1891	Oct. 14, 1890	6.16	
The Dennis Ditch.....	Cache la Poudre.....	Apr. 21, 1891	Mar. 25, 1891	3.50	Richard S. Dennis
The Dry Creek Feeder.....	Rains and Snows.....	June 18, 1891	June 15, 1891	Not given.	Frank Harrison and Elisa S. Darrough
The Garrett Ditch.....	Howe's Slough.....	July 25, 1891	Apr. 15, 1881	15.00	F. W. Garrett
The Gibson Ditch (statement of completion).....	Dry Creek.....	Nov. 12, 1891	Nov. 12, 1891	Not given.	A. O. Gibson
The North Poudre Land & Canal Co.'s Feeder to Reservoir No. 1 }	North Poudre.....	Dec. 2, 1891	Aug. 1883	134.55	The North Poudre Land and Canal Company
Same to Reservoir No. 2.....	North Poudre.....	Dec. 2, 1891	1884	81.28	
Same to Reservoir No. 3.....	North Poudre.....	Dec. 2, 1891	Dec. 1883	269.10	
Same to Reservoir No. 4.....	North Poudre.....	Dec. 2, 1891	Feb. 1890	44.48	
The Owl Creek Ditch.....	Owl Creek.....	Jan. 28, 1892	Oct. 14, 1891	120.00	The Owl Creek Ditch and Reservoir Company

The Isaac D. Miller Ditch	Lone Tree Creek	Feb. 1, 1892	Feb. 1, 1882	1.00	Isaac D. Miller
The Isaac D. Miller Irrigation, } Well and Supply Ditch	Lone Tree Creek	Feb. 1, 1892	June 1, 1889	4.50	
The Decker & Pearce Ditch	Dry Gully	Feb. 3, 1892	Jan. 8, 1892	120.00	Scott Decker and John Pearce
The J. L. Thomas Ditch	Fossil Creek	April 28, 1892	Jan. 28, 1892	14.05	John L. Thomas
The Cache la Poudre Reservoir } and Supply Ditch	Cache la Poudre	May 2, 1892	Feb. 10, 1892	140.00	The Cache la Poudre Reservoir Company
The Feeder to the Ricketts Reservoir }	Soldier Creek	May 24, 1892	Mar. 18, 1892	100.00	Philander Ricketts
Same	Soldier Creek	June 7, 1892	Mar. 18, 1892	100.00	Philander Ricketts, amended statement
The Coal Bank Draw Seepage Ditch	Coal Bank Draw	Aug. 17, 1892	May 15, 1892	10.00	Cyrenus D. Neff
The Lookout Reservoir Feeder	Cache la Poudre	Sept. 10, 1892	July 7, 1892	22.00	A. H. Meyers
The Feeder to Darling Reservoir	{ Cache la Poudre, } waste & Seepage }	Sept. 27, 1892	1890	18.00	Willard M. Darling
The McGinley Seepage Ditch	Seepage	Oct. 1, 1892	Sept. 28, 1892	50.00	A. A. McGinley
The Hill Seepage Ditch	Waste and seepage	Oct. 5, 1892	Sept. 27, 1892	3.00	Simcoir Hill
The Abram Washburn Ditch No. 3	Box Elder Creek	Oct. 18, 1892	July 8, 1892	27.00	Abram Washburn
The Coal Lake Reservoir Feeder	Cache la Poudre	Oct. 31, 1892	Aug. 1, 1892	6.00	L. N. Cole <i>et al.</i>
The Query Ditch	A slough, unnamed	Nov. 23, 1892	Oct. 17, 1892	5.19	O. V. Query

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 3, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Lambert Reservoir.....	Cache la Poudre.....	Larimer County.	Jan. 3, 1891	Mar. 1, 1890	2,170,000	John Laubert <i>et al.</i>
The Dennis Reservoir.....	Cache la Poudre.....	Larimer County.	Apr. 21, 1891	Mar. 25, 1891	4 870,000	Richard S. Dennis
The Hill Brothers Reservoir...	Cache la Poudre.....	Larimer & Weld	June 26, 1891	June 2, 1891	4,000,000	Henry C. and A. L. Hill
The Horner Reservoir.....	Cache la Poudre.....	Lake canal.....	July 6, 1891	April 25, 1891	19,220,000	Alfred Latson <i>et al.</i>
The Jameson Reservoir.....	Box Elder creek.....	Feeder to same.....	July 15, 1891	June 1, 1891	3,525,218	George L. Jameson
The Terry Lake Reservoir.....	Dry creek.....	Feeder to same.....	July 20, 1891	Dec. 18 1890	356,000,000	Larimer & Weld Res. Co.
The Cuthbertson Reservoir....	Not given.....	Not given.....	Oct. 26, 1891	Oct. 14, 1891	Not stated	James Cuthbertson
The North Poudre Land & Canal Co.'s Reservoir No. 1.	North Poudre.....	North Poudre canal.....	Dec. 2, 1891	{ Aug. 1883	29,345,591	The North Poudre Land and Canal Company.
The North Poudre Land & Canal Co.'s Reservoir No. 2.				{ 1884	145,355,180	
The North Poudre Land & Canal Co.'s Reservoir No. 3.				{ Dec. 1883	111,057,813	
The North Poudre Land & Canal Co.'s Reservoir No. 4.	Owl creek.....	Owl Creek ditch	Jan. 28, 1892	{ Feb. 1890	46,766,420	The Owl Creek Ditch and Reservoir Company.
The Decker & Pearce Reservoir				{ Oct. 19, 1891	8,623,000	
The Box Elder Ditch & Reservoir Co.'s Reservoir No. 1....	Lone Tree Creek.....	{ Decker & Pearce ditch	Feb. 3, 1892	Jan. 8, 1892	16,000,000	Scott Decker and Juno Pearce
	Box Elder creek.....	{ The Box Elder Ditch & Reservoir Co.'s D. & R. Co.'s D	Feb. 10, 1892	Nov. 15, 1891	4,136,000	{ The Box Elder Ditch and Reservoir Company.

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STATEMENT CONCERNING DITCHES

IN WATER DISTRICT No. 4. SHOWING MODIFICATIONS OF THE DECREES GOVERNING APPROPRIATIONS IN SAID DISTRICT, FROM THE CERTIFIED COPY FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE, MARCH 18, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Pioneer Ditch.....	Big Thompson river.	Dec. 1, 1872	5.00	.....	618.42	24 A
The Handy Ditch.....	Big Thompson river.	Oct. 15, 1877	198.00	.....	1195.25	39 A
The Home Supply Ditch.....	Big Thompson river.	Mich. 15, 1881	286.52	.....	1949.61	50 A

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 4, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER WM. A. BEAN, LOVELAND, COLORADO, APPOINTED MAY, 1888.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The North Loudon Ditch	{ Big Thompson } creek	Jan. 22, 1891	Nov. 20, 1883	65.20	The Fairport Lake & Canal Company
The Charles L. Martin Irrigating Ditch.	Buckhorn creek	May 6, 1891	Not stated	Not given	Charles L. Martin
The Extension of The Perkins Ditch No. 17	Buckhorn creek	Aug. 8, 1891	Aug. 5, 1891	6.00	J. R. Mason <i>et al</i> (enlargement of)
The Peterson Ditch	{ Supply Waste } { Gulch }	Feb. 25, 1892	Feb. 15, 1892	8.00	Jens Peterson
The Butler-White Ditch.	Hubbel Run creek	Oct. 20, 1892	May 1, 1892	2.00	T. Butler & F. White

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO 4, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR,	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Rist Reservoir	Big Thompson Creek	Geo. Rist Ditch.	Jan. 12, 1891	Sept. 15, 1874	5,210,865	Chas. G. Buckingham
The Fairport Lake	Big Thompson Creek	Louden Canal	Jan. 22, 1891	Nov. 20, 1883	25,473,016	{The Fairport Lake and Ca- nal Company}
The Hummel Reservoir	Big Thompson Creek	Handy Ditch.	Feb. 17, 1891	Nov. 20, 1882	12,806,640	John C. Hummel
The Darrough Reservoir	Big Thompson Creek	{ Loveland and Greeley }	Feb. 18, 1891	Feb. 6, 1891	18,060,000	{ Frank Harrison and Eliza S. Darrough }
The De France Reservoir	Big Thompson Creek	Handy Ditch.	Mar. 16, 1891	May 10, 1883	11,325,600	A. H. De France
The Hays Reservoir	Big Thompson Creek	Barnes Ditch	Apr. 18, 1891	Not stated.	563,715,512	{The Farmers Irrigating & Reservoir Company}
The Huppe Reservoir	Big Thompson Creek	Handy Ditch	Aug. 7, 1891	May 1, 1882	3,168,990	Huppe Bros.
The S. J. Wilson Reservoir	Big Thompson Creek	Handy Ditch.	Aug. 7, 1891	Apr. 1, 1881	6,511,280	S. J. Wilson
The Darrough Reservoir	Big Thompson Creek	{ Loveland and Greeley }	Jan. 9, 1892	Oct. 10, 1891	18,060,000	{ Frank Harrison and Eliza S. Darrough }
The Bosch Reservoir	Carwyle Gulch	Built on Gulch	June 4, 1892	Dec. 29, 1891	1,468,710	Charles H. Bosch

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 5, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892. —COMMISSIONER J. W. DANIELS, LONGMONT, COLO., APPOINTED IN 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Left Hand Ditch Co.'s Ditch	South St. Vrain.	Sept. 29, 1891	July 20, 1891	208.33	The Left Hand Ditch and Reservoir Company
The Eli Evans Ditch.	Evans creek	Nov. 20 1891	1885	6.60	Eli L. Evans
The Golden Rule Mining Company's Ditches	South St. Vrain Middle St. Vrain.	Oct. 27, 1892	Sept. 7, 1892	130.20 130.20	Milton N. Campbell

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 5, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Clennon Reservoir	St. Vrain Creek	Highland Ditch.	Jan. 19, 1891	Oct. 22, 1890	4,144,734	C. J. Clennon
The Mulligan Reservoir	St. Vrain Creek	Highland Ditch.	Feb. 19, 1891	Nov. 1878	6,033,060	Lawrence T. Mulligan
The Pettit Reservoir No. 1	St. Vrain Creek	Highland Ditch.	June 15, 1891	June 14, 1891	6,534,000	James A. Howze
The Davis Reservoir	St. Vrain Creek	Highland Ditch.	July 14, 1891	June 19, 1891	3,484,800	F. P. Woodby
The Beaver Park Reservoir	Beaver Creek	Built on stream.	July 21, 1891	June 1, 1882	108,900,000	Highland and Supply Ditch Companies.
The Audubon Reservoir No. 1					1,500,000	E. J. Parker and
The Audubon Reservoir No. 2	St. Vrain Creek	On the Stream	July 25, 1891	Not stated	418,000,000	E. M. Albertson
The Audubon Reservoir No. 3					2,000,000	
The Left-hand Ditch Com- pany's Reservoir No. 2	South St. Vrain	On the Stream	Sept. 29, 1891	July 20, 1891	39,000,000	The Left-hand Ditch Co.
The Winger Reservoirs	St. Vrain Creek	Highland Ditch.	Oct. 24, 1891	Oct. 6, 1891	1,000,000	Henry H. Winger
The Werden Reservoir	St. Vrain Creek	Highland Ditch.	Aug. 5, 1891	May 10, 1891	8,712,000	Werden & Holaday
The Ballinger Reservoir	{ Ballinger & John- son Creeks }	Built on Stream.	Dec. 12, 1891	Sept. 15, 1891	2,178,000	Harnen Ballinger
The Lake Minnie Reservoir	St. Vrain Creek	Highland Ditch.	Dec. 21, 1891	Mar 1882	8,229,080	J. W. Erkenbeck
The Abe Ballinger Reservoir	Morrison Creek	Feeder to same	Feb. 29, 1892	Dec. 10, 1891	1,568,160	{ James Carroll and Frank Ballinger }

The Walker Reservoir	St. Vrain Creek	Highland Ditch	May 9, 1892	Apr. 27, 1892	8,363,520	----- Wm. C. Walker
The Crystal Lake Reservoir	St. Vrain Creek	Highland Ditch	May 14, 1892	Spring 1873	10,160,000	----- { Wm. Atwood and M. N. Kramer.
The Enlargement of the Beaver Park Reservoir	Beaver Creek	Built on Stream	Aug. 11, 1892	June 30, 1892	125,888,400	----- { The St. Vrain Reservoir and Fish Company.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT No. 6, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER A. C. STILLWELL, BOULDER, COLO. APPOINTED MAY 13, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Eggleston Ditch No. 3.-----	Coal creek-----	Dec. 22, 1890	June 1, 1874	9.00	George W. and E. M. Eggleston
The Eggleston Ditch No. 4.-----	Coal creek-----	Dec. 22, 1890	Oct. 1, 1879	9.00	
The High Line Ditch-----	Middle Boulder c'k-----	March 2, 1891	Nov. 10, 1890	150.55	George W. Giggey <i>et al.</i> (Am'd Statm't)
The Mount Ogdan Ditch-----	Coal creek-----	June 2, 1891	March 4, 1891	Not given	The Mount Ogdan Ditch and Reservoir Co.
The Autrey-McCammon Ditch--	Goose creek-----	Sept. 18, 1891	Not stated	8.50	Elijah Autrey <i>et al.</i>
The Kneale Ditch-----	Dry creek-----	June 15, 1892	April 2, 1892	40.00	C. A. Kneale & P. H. Kneale

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 6, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Eggleston Reservoir No. 3	{ Coal Creek	{ Eggleston Ditch	{ Dec. 22, 1890	Oct. 1, 1874	1,015,860	..... Geo. W. Eggleston <i>et al.</i>
The Eggleston Reservoir No. 4		{ Eggleston Ditch	{ Dec. 22, 1890	Nov. 1, 1879	8,000,000	..... G. W. and F. W. Eggleston
The Jasper Reservoir		{ Built on the	Mar. 2, 1891	Nov. 6, 1890	{ 99,800,000	..... Geo. W. Giggey <i>et al.</i>
The Diamond Reservoir		{ Gulches			{ 33,200,000	
The Ruby Reservoir	Ruby Gulch				{ 36,000,000	
The Jenny Lind Reservoir	Natural Drainage	{ Built on the	May 26, 1891	May 13, 1891	{ 11,600,000	The Boulder High Line Can- al Company
The Peterson Reservoir		{ Gulches			{ 27,000,000	
The Mount Ogden Reservoir	Coal Creek	{ Mount Ogden	June 2, 1891	Mar. 4, 1891	4,627,360	Mount Ogden D. & R. Co.
The South Boulder Reservoir	South Boulder Creek	{ Built on the	June 16, 1891	May 29, 1891	175,650,000	{ The Boulder High Line Canal Company
The Lower Boulder Extension Reservoir	Boulder Creek	{ Lower Boulder	Feb. 29, 1892	Nov. 29, 1891	29,838,600	
The Six Mile Reservoir	Boulder Creek	{ Boulder and	Mar. 19, 1892	Dec. 20, 1891	65,862,720	{ The Lower Boulder Exten- sion Reservoir Company
The Last Chance Reservoir		{ White Rock				
No. 1		{ Ditch				..... R. J. and Carrie S. Allison
The Last Chance Reservoir	Coal Creek	Last Chance Ditch	Apr. 22, 1892	May 20, 1870	{ 3,034,515	
No. 2					{ 4,866,330	
The Kneale Reservoir	Boulder Creek	{ Feeder to Res- ervoir	June 15, 1892	Jan. 29, 1891	7,103,100	..... C. A. and P. H. Kneale

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 7, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, MATTHEW J. CLARK, GOLDEN, COLO., APPOINTED MAY 13, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
Underground Conduit (unnamed)	Seepage Water....	Dec. 18, 1890	Sep. 20, 1890	100.00	A. McL. Hawks
The Highland Pipe Line.....	Golden Gate Gulch	Dec. 20, 1890	Dec. 15, 1890	200.00	R. G. Webster
The Clear Creek Underground Pipe Line and Ditch.....	Undergr'd. Spring Seepage & Waste	} Jan. 3, 1891	} Nov. 4, 1890	30.00	Benjamin D. Spencer <i>et al.</i>
The Clear Creek Pipe Line.....	Clear Creek.....			8.00	
The Max Baer Lateral Ditch.....	{ Clear Creek through Rocky Mt. Ditch	} Mar. 27, 1891	} Mar. 2, 1891	3.00	Max Baer
The Bowles Ditch.....	Dry Creek.....			5.00	
The Golden City Water Works.....	Seepage Water.....	June 3, 1891	Mar. 1, 1891	Not given	E. Bruce Bowles <i>et al.</i>
The Stormfield Ditch.....	Clear Creek.....	Oct. 13, 1891	April 3, 1878	4.00	City of Golden
The Terry Ditch.....	Spring & Seepage.....	Nov. 23, 1891	June 20 1886	2.00	F. D. Storm
The Storm Ditch.....	{ Clear Creek through Farmers, H. L. & Allen Ditches.....	} Feb. 26, 1892	} Dec. 1, 1891	2.72	Charles H. Terry
					The Storm Reservoir Company

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 7, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of Ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The George Richardson Reservoir No. 1.	Clear creek	Farmers' high line and signal ditches	Dec. 22, 1890	Nov. 15, 1889	1,203,000	George Richardson
The George Richardson Reservoir No. 2	Clear creek	Farmers' high line and signal ditches	Dec. 22, 1890	Nov. 20, 1889	1,034,000	George Richardson
The Chioyenda Reservoir	Clear creek	Farmers' high line	Dec. 30, 1890	Dec. 15, 1890	2,132,500	Benjamin D. Spencer <i>et al</i>
The Whittemore Reservoir	Clear creek	Farmers' high line	Jan. 22, 1891	Nov. 10, 1890	462,500	O. A. Whittemore
The Risdon Reservoir	Seepage water	Dam in gulch	Jan. 24, 1891	July 16, 1889	1,235,000	John S. Risdon
The George Richardson Reservoir No. 3	Clear creek	Farmers' high line and signal ditches	Jan. 24, 1891	Dec. 29, 1890	4,800,000	George Richardson
The George Richardson Reservoir No. 4	Clear creek	Farmers' high line and signal ditches	Jan. 24, 1891	Dec. 29, 1890	300,000	George Richardson
The George Richardson Reservoir No. 5	Clear creek	Farmers' high line and signal ditches	Jan. 24, 1891	Dec. 29, 1890	438,000	George Richardson
The George Richardson Reservoir No. 6	Clear creek	Farmers' high line and signal ditches	Jan. 24, 1891	Dec. 29, 1890	440,000	George Richardson
The Quimby Reservoir	Clear creek	Farmers' high line	Feb. 17, 1891	Dec. 29, 1890	756,000	M. M. Quimby
The Whittemore Reservoir No. 2	Clear creek	Farmers' high line	May 22, 1891	May 20, 1891	421,475	O. A. Whittemore

STATEMENT CONCERNING RESERVOIRS—Concluded.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of Ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Swayze Reservoir	{ Branch of Arapahoe creek	Built on stream.	Dec. 1, 1890	Nov. 24, 1890	217,000	Walter J. Swayze
The Storm Reservoir	Clear creek	{ Farmers' high line, Allen and Storm Ditches.	{ Feb. 26, 1892	Dec. 1, 1891	2,335,750	The Storm Reservoir Co.
The Porter Reservoir	Clear creek	{ Farmers' high line and signal ditches	{ Mar. 19, 1892	Dec. 6, 1890	{ 4,755,900 7,311,238	{ W. W. Porter W. W. Porter
Enlargement of same		Same				
The Mayham Lake or Reservoir	{ Waste water, seepage and springs	Collects direct	Mar. 29, 1892	May, 1890	10,000,000	C. H. Mayham, S. L. Haycox

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 8, GIVING THE DATE, ORDER OF PRIORITY AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF THE COURT IN THE FOURTH JUDICIAL DISTRICT, SINCE THE STATEMENT PUBLISHED IN THE "FOURTH BIENNIAL REPORT."

NAME OF DITCH, CANAL OR RESERVOIR.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch, canal or reservoir.	Cubic feet per second appropriated in district.	Order of priority in district.
The Ditch of Ahimaz Gove	West Plum creek	May 31, 1867	2.52	-----	411.38	41
The Alfred G. Perry Ditch	Plum creek	Dec. 31, 1868	1.70	-----	-----	42½
The Disbrow Extension of Gove Ditch	West Plum creek	Sept. 31, 1871	0.40	-----	-----	58½
The Ratcliff Plum Creek Ditch	West Plum creek	April 1, 1872	7.50	-----	-----	61
The Heiser Ditch	East Cherry creek	April 30, 1874	0.985	-----	-----	95A
The James Ditch	West Plum creek	Jan. 1, 1883	4.20	-----	-----	139
The Schultz Ditch	Russellville branch.	Jan. 1, 1883	2.00	-----	-----	140
The Eureka Ditch	East Plum creek	Mar. 31, 1883	7.00	-----	-----	141
The Ratcliff & Dillon Ditch	Spring creek	Mar. 1, 1883	4.50	-----	-----	142
The Herzog Ditch	Cherry creek	Sept. 10, 1883	10.32	-----	-----	143
The Rawley Ditch	Cherry creek	Mar. 31, 1884	4.00	-----	-----	144

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH, CANAL OR RESERVOIR.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch, canal or reservoir.	Cubic feet per second previously appropriated in district.	Order of Priority in district
The Hawkey Ditch	Cherry creek	Aug. 25, 1884	3.00	-----	-----	145
The Parker Ditch	Cherry creek	Jan. 1, 1885	3.00	-----	-----	146
The Barnes Ditch	Cherry creek	Mar. 31, 1885	4.50	-----	-----	147
The Parker No. 2 Ditch	Cherry creek	Mar. 31, 1885	3.00	-----	-----	148
The Gregg Ditch	Cherry creek	Mar. 31, 1885	14.00	-----	-----	149
The John Kinner Ditch	West Plum creek	April 1, 1885	3.52	-----	-----	150
The Glenn Grove Feeder Ditch	West Plum creek	Sept. 10, 1885	7.00	-----	-----	151
The Locust Grove Ditch	Indian creek	May 3, 1886	3.00	-----	-----	152
The Welch Ditch	Cherry creek	April 28, 1886	14.25	-----	-----	152½
The Green Meadow Ditch	Indian creek	May 15, 1886	2.79	-----	-----	153
The Sellers Ditch	Sellers gulch	May 18, 1886	2.50	-----	-----	154
The Bouldorf Ditch	Cherry creek	Mar. 31, 1886	6.00	-----	-----	155
The Melvin Ditch	Cherry creek	Feb. 17, 1887	12.00	-----	-----	157
The Stevens & Jackson Ditch	Jackson creek	March 1, 1887	7.80	-----	-----	158
The Feeder of Stevens Reservoir	West Plum creek	May 1, 1888	-----	-----	-----	159

The Lambert Ditch	Indian creek	Feb. 8, 1888	10.00	-----	160
The King Ditch	East Plum creek	Feb. 23, 1888	1.40	-----	161
The Middleton Ditch	West Plum creek	March 3, 1888	7.00	-----	162
The West Plum Creek & Bottom Reservoir Ditch	West Plum creek	Oct. 1, 1888	8.67	-----	164
The Arapahoe Ditch	Cherry creek	Sept. 1, 1889	50.00	-----	168
The Wakeman Ditch No. 1.	Willow creek	April 1, 1891	3.60	-----	169
The Wakeman Ditch No. 2.	Willow creek	April 1, 1891	0.80	-----	170
The Cottonwood Ditch No. 1.	Willow creek	April 1, 1891	2.00	-----	171

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 8, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER D. W. STEVENS, DENVER, COLO. APPOINTED APRIL, 21, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in Cubic feet.	NAMES OF CLAIMANTS.
The Chamberlain Ditch or Lateral	Cherry creek	Dec. 5, 1890	Aug. 18, 1890	85.50	The Denver Water Storage Company
The Nelly Bly Ditch	South Platte	Jan. 12, 1891	Dec. 23, 1890	333.10	J. D. Brown
The Newton Lateral or Ditch	Cherry creek	Oct. 31, 1890	{ Oct. 31, 1890 Nov. 4, 1890	{ 85.50 85.50	The Denver Water Storage Company
The Wild Cat Lateral or Ditch	Cherry creek	Oct. 31, 1890	{ Oct. 31, 1890 Nov. 4, 1890	{ 85.50 85.50	The Denver Water Storage Company
The Arapahoe Canal	Cherry creek	April 23, 1891	Jan. 25, 1890	140.00	The Denver Water Storage Company
The Horans Ditch	Devinuey ravine	May 9, 1891	1889	Less than 1	Timothy Horan
Washington Park Ditch	Indian creek	July 23, 1891	July 21, 1891	13.12	Alexander Walker
The Stoner and Milsap Ditch	Plum creek	Aug. 6, 1891	May 15, 1869	20.00	G. Stoner, <i>et al.</i>
The Burke Ditch	East Plum creek	Aug. 19, 1891	Not stated.	6.00	John Burke
The Wakeman Ditch	Willow creek	Aug. 28, 1891	{ July 8, 1891 July 31, 1891 July 7, 1891 Aug. 16, 1891	{ 42.00 34.00 54.00 34.00	C. B. Kountze
The Wakeman Ditch No. 2					
The Cottonwood Ditch					
The Cottonwood Ditch No. 2					

The Leonora Ditch.....	Little Willow Creek	Dec. 21, 1891	Oct. 5, 1891	{ not given } 3.00	John W. Ash
The Ash Ditch.....					
The Tinker North Ditch.....	Natural Ravines..	May 10, 1892	May 4, 1892	{ 20.00 } 20.00	Robert H. Tinker
The Tinker South Ditch.....					
The Wolhurst Ditch No. 1.....	Waste and Seepage from Ravines with- out names.....	{ May 10, 1892 }	April 16, 1892	{ 3.00 } 3.00	Edward O. Wolcott
The Wolhurst Ditch No. 2.....					
The Sanderson Ditch	Creek in 4 S. 68 W.	May 16, 1892	1882	5.50	J. Fernley & A. A. Higinbotham
The Couch Ditch.....	Olmstead Gulch...	July 5, 1892	1867	68.00	Samuel F. Couch
The Conehay Ditch.....	Cherry Creek.....	{ Aug. 24, 1892 }	{ June 8, 1892 }	{ 4.25 } 4.25	Frank M. Conehay
The Conehay Ditch No. 2.....	Antelope Creek...		{ June 1, 1892 }	4.25	
The Rock Ridge Ditch.....	Cherry Creek.....	Sept. 1, 1892	July 1, 1887	3.00	Catherine A. Colburn

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT No. 8, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Diamond H'g'ts Reservoir	South Platte river	{ N. Colo. I. Co.'s canal	April 1, 1891	Jan. 22, 1891	2,387,096	James Leonard <i>et al.</i>
The Willow Creek Reservoir	Not stated	Not given	Aug. 26, 1891	Aug. 12, 1891	5,351,340	C. B. Kountze
The Leonora Ditch Reservoir	Little Willow creek	Leonora ditch	} Dec. 21, '91	Oct. 5, 1891	87,120	} John W. Ash
The Ash Ditch Reservoir		Ash ditch		Nov. 30, 1891	653,000	
The Armor Reservoir	South Platte river	Fassett & Weir ditch	Jan. 18, 1892	Oct. 23, 1891	989,850	Independent Ice Co.
The Tinker Reservoir	Seepage, etc.	Tinker N. & S. ditch	May 10, 1892	May 4, 1892	640,000	Robert H. Tinker
The Couch Reservoir	Olmstead gulch	Couch ditch	July 5, 1892	1867	1,667,050	Samuel F Couch
The Conehay Reservoir	Antelope creek	Conehay No. 2	Aug. 24, 1892	June 1, 1892	550,000	Frank M. Conehay

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 9, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, FRANK EWEES, RESIDENCE, MORRISON, COLORADO.
APPOINTED SPRING OF 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Rosalie Ditch.....	Reader Creek.....	Jan. 6, 1891	Dec. 4, 1890	9.00	-----Jennie E. Lerchen
The Wittiberg Ditches { No. 1 } { No. 2 }	Yaukeet Creek {	June 9, 1892	{ May 1, 1883 } { May 25, 1892 }	1.00	-----B. F. Niesz
	Spring Gulch }			1.00	
The Enlargement of the Harriman Ditch.....	Bear Creek {	Sept. 23, 1892	{ Aug. 15, 1892 }	76.75	-----The Harriman Ditch Company
	Turkey Creek }			20.00	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 23, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, M. R. HAMLIN, FAIRPLAY, COLO. APPOINTED SPRING OF 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Maxwell Ditch.....	Little Roland C'k.	May 13, 1891	June, 1875	7.81	..... Rufus E. Maxwell
The Runner Ditch.....	Wigwam Creek...	May 16, 1891	Nov. 16, 1889	.85	..... Wm. D. Runner
The Jasper Ditch.....	South Platte River	} June 20, 1891	June 13, 1891	30.00	} Lars Nelson <i>et al.</i>
The Malice Ditch.....	Four Mile Creek...		May 5, 1890	30.00	
The Crow Hill Ditch.....	Deer Creek.....	July 13, 1891	April 4, 1891	30.00	..... W. W. Hooper <i>et al.</i>
The Edmiston Ditch.....	Buffalo Creek.....	July 27, 1891	1874	10.00	} J. L. Sweet
The Harry L. Sweet Ditch.....	Buffalo Creek.....		1873	30.00	
The Jackson Ditch.....	Buffalo Creek.....		1874	10.00	
The Hames Ditch.....	Trout Creek.....	Aug. 22, 1891	July 3, 1891	3.00	..... J. C. Hames
The Trout Creek Ditch.....	Trout Creek.....	Oct. 3, 1891	1873	22.00	..... Miz & Armstrong
The Inlet Ditch to Michigan Reservoirs.....	Michigan Creek...	Jan. 1, 1892	Sept. 23, 1889	17.00	..... Geo. M. Ohler <i>et al.</i>
The Enlargement of Hot Springs Ditch.....	{ South Fork of } South Platte....	May 17, 1892	Jan. 19, 1892	408.00	..... The Hartzel Hot Springs Reservoir Company
The Andrews Ditch, No. 1.....	Rule Creek.....	June 9, 1892	May 27, 1892	4.60	..... A. L. Andrews
The Ferndale Water Works Pipe Lines.....	{ Little and Big } Spring Creek...	June 29, 1892	June 11 & 20 1892	All the flow	..... H. L. Aulls

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 23, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of Stream supplying water therefor.	Name of Ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Lost Canon Reservoir.....	Lost Park creek.....	Natural site.....	Jan. 27, 1891	Jan. 5, 1891	900,000,000	.....E. P. Martin <i>et al.</i>
The Lost Canon Reservoir.....	Lost Park creek.....	Natural site.....	Jan. 29, 1891	Jan. 1, 1891	2,000,000,000	.....Stephen R. Pratt
The South Park Reservoir.....	South Fork of South Platte river.....	On the stream.....	Mar. 7, 1891	Feb. 1, 1891	2,214,000,000	.....Cyrus G. Richardson
The Lost Park Reservoir.....	Lost Park creek.....	Natural site.....	Mar. 13, 1891	Jan. 1, 1891	2,000,000,000	.....The High Line Reser. Co.
The Castle Lake Reservoir.....	Waterfall creek, etc.	On the stream.....	Apr. 24, 1891	Feb. 1, 1891	500,000,000	.....The Castle Lake Reser. Co.
The Tarryall Reservoir.....	Tarryall creek.....	On the stream.....	May 18, 1891	Apr. 28, 1891	1,510,000,000	.....The Tarryall D. & Reser. Co.
The Geneva Reservoir No. 1.....	Geneva gulch.....	On the stream.....	July 13, 1891	May 30, 1891	975,000,000	.....Barney & Owen
The Geneva Reservoir No. 2.....					350,000,000	
The Geneva Reservoir No. 3.....					432,000,000	
The Tarryall Reservoir.....	Tarryall creek.....	On the stream.....	Aug. 21, 1891	Not stated....	1,679,090,000	.....The Tarryall Reservoir Co.
The Trout Creek Reservoir.....	Trout creek.....	Trout creek dit'h	Oct. 3, 1891	1889	1,154,000,000	.....Miz & Armstrong
The Michigan Upper Reserv'r.....	Michigan creek.....	Inlet ditch.....	Jan. 11, 1892	Sep. 23, 1889	5,500,000	.....Geo. W. Ohler <i>et al.</i>
The Michigan Lower Reserv'r.....					2,700,000	
The Quick Reservoir.....	Jefferson creek.....	On the stream.....	Jan. 11, 1892	Aug. 6, 1891	7,310,000	.....David Baker

STATEMENT CONCERNING RESERVOIRS—*Concluded.*

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of Ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Hartzel Hot Springs Reservoir	{ So. Platte, M. F'k S. Pl. & 4 mile c'k.	Hot Sp. Thompson & E Alden D	{ May 17, 1892	Jan. 19, 1892	1,111,622,000	{ The Hartzel Hot Springs Reservoir Company.
The Geneva Reservoir No. 1.	Geneva gulch	On the stream..	{ June 1, 1892	May 30, 1892	{ 975,000,000	{ E. M. Albertson
The Geneva Reservoir No. 2					{ 350,000,000	
The Geneva Reservoir No. 3					{ 432,000,000	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 46, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, FRANK STAPLES, HEBRON, COLO. APPOINTED AUGUST 10, 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Saint Joseph Ditch.....	Beaver Creek.....	Feb. 11, 1891	May 1, 1889	12.00	..... Silas Haskins
The Buckeye Ditch.....	Little Grizzly.....	Feb. 11, 1891	April 1, 1890	18.00	..... Fletcher Campbell
The Jessie Ditch.....	Beaver Creek.....	Feb. 11, 1891	June, 1882	9.00	..... Silas Haskins
The Jay Bird Ditch.....	Bennett Creek.....	Feb. 11, 1891	July 15, 1887	20.00	} William R. Monahan
The Monahan Ditch.....	Bear Creek.....	Feb. 11, 1891	Dec. 8, 1890	12.00	
The Enlargement and Extension of the Staples Ditch.....	North Fork of Little Grizzly.....	Feb. 11, 1891	April 4, 1889	23.00	..... James Marr <i>et al.</i>
	North Fork River.....	Feb. 18, 1891	June 11, 1888	18.00	..... Jacob Reithmayer
The Boulder Ditch.....	Lone Pine Creek.....	Feb. 18, 1891	June 15, 1885	20.00	..... John L. Spotts
The Stormy Ditch, No. 1.....	No Name Creek.....	April 1, 1892	Oct. 16, 1890	Not given	..... Elton Mansfield

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 47, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, W. D. BECKWITH, WALDEN, COLO. APPOINTED AUGUST 10, 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Gould Ditch.....	Michigan creek.....	May 1, 1891	Sep. 10, 1890	20.00	..... Edward B. Gould
The Kermode Ditch Enlargment	Canadian river.....	June 12, 1891	Sep. 1, 1890	7.50	..... Griffith Kermode
The Teller Ditch.....	Jack creek.....	June 12, 1891	Oct. 14, 1889	9.00	..... John D. Shearer
The Terrill Ditch.....	Michigan river.....	June 12, 1891	June 1, 1888	9.00	..... Martha E. Brannel
The Richmond Ditch.....	Michigan river.....	June 12, 1891	May 10, 1888	10.00	..... N. P. Richmond
The Jakey Ditch.....	Michigan river.....	June 12, 1891	Not stated	10.00	..... I. C. Ish <i>et al.</i>
The Ish & Everhard Ditch.....	Illinois river.....	June 12, 1891	July 16, 1886	15.00	..... Samuel P. Carden
The Lowland Ditch.....	Owl creek.....	June 12, 1891	April 15, 1888	12.00	..... Leslie Gillett
The John Fleck Ditch.....	Muddy creek.....	Mar. 21, 1892	June 1885	Not given	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 48, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, ANSON D. HOUSE, P. O. LARAMIE, WYO. APPOINTED 1890.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Water Supply and Storage Company's Ditch.....	West branch of } Laramie river. }	Nov. 2, 1891	Aug. 7, 1891	400.00	-----The Water Supply & Storage Company
The Jim Creek Ditch.....	Jim creek.....	April 8, 1892	Mar. 23, 1892	9.00	-----Robert Ferguson
The Reservoir Ditch.....	Jim creek.....	April 8, 1892	Mar. 22, 1892	8.00	-----Robert Ferguson

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 64, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892—COMMISSIONER R. J. PATTERSON, STERLING, COLO. APPOINTED JANUARY 26, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Lillian Springs Ditch.....	South Platte river.	July 20, 1891	April 20, 1891	23.90	..... Sam B. Rice
The Liddle Ditch.....	Spring creek.....	Feb. 15, 1892	Oct. 21, 1891	10.00	..... Thomas R. Liddle
The South Reservation Ditch....	South Platte river.	Nov. 15, 1892	Sep. 14, 1892	60.00	..... P. P. Hargraves <i>et al.</i>

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 65, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Haigler Land and Canal Company's Ditch.....	North fork of Republican river...	Jan. 14, 1891	Oct. 20, 1890	91.00	----- Haigler Land and Canal Company
The Daniel Shields Ditch.....	{ North fork of Republican river.	Jan. 24, 1891	-----	14.58	----- Daniel Shields
The ----- II Ditch.....	{ North fork of Republican river.	April 8, 1891	Jan. 30, 1891	12.93	----- J. W. Bowles
The Charles Donnelly Ditch.....	{ Arickaree river....	May 14, 1891	Mar. 17, 1891	13.00	----- Charles Donnelly
The Charles Donnelly Ditch, amended statement.....	Arickaree river....	Nov. 12, 1891	Mar. 17, 1891	13.00	----- Charles Donnelly
The Donnelly Ditch No. 2.....	Arickaree river....	Mar. 1, 1892	Feb. 29, 1892	12.00	----- Charles Donnelly
The Extension of the Haigler Land and Canal Co.'s Ditch....	Arickaree river....	Mar. 1, 1892	Dec. 10, 1891	91.00	----- The Haigler Land and Canal Company
The Wray High Line Ditch.....	{ North fork of Republican river.	June 15, 1892	Mar. 24, 1892	91.00	----- The Haigler Land and Canal Company

CHAPTER III.

IRRIGATION DIVISION NO. 2.

ARKANSAS DIVISION.

J. W. McDaniel, Superintendent of Irrigation. Residence, Nepesta, Colorado.

This division presents an anomalous condition of affairs.

The Arkansas river has a mountain drainage area of over 3,000 square miles, and stands second only to the Rio Grande, on the eastern slope, in the volume of its water supply. The valley is noted for the completeness and extent of its system of canals. The Bob creek, Arkansas river, Laguna, Amity, Bessemer, Otero and many others, in size, length and in the great outlay of capital in their construction, are monuments to the enterprise of their projectors and their faith in the possibilities of that section of country.

They are known to cover many hundred thousand acres of most fertile lands all favorably adapted for economical irrigation.

In the extent and variety of its products the soil is not excelled in any section of the State. Fruit culture is prosecuted with remarkable success.

Canon City is noted for its peaches, pears and small fruits. "Watermelon Day" is an annual event of State interest at Rocky Ford, "Potato Bake Day" at Monument.

Irrigation has been practiced to a greater or less extent for many years. Large areas are known to be placed under cultivation each year. And yet, notwithstanding its unbounded resources and the indomitable energy displayed in their development, the report from the Superintendent of the division is one of the most doleful that could emanate from the abode of "Lost Souls."

Thirteen Water Districts are embraced in the division, in ten of which Water Commissioners have been appointed, and are presumed to have been in active service during the irrigating season; but at this date, December 20, there is no documentary evidence in this office showing that four of them have not been drowned in some of their ditches.

Mr. Geo. Peck, Water Commissioner of District No. 17—one of the most important in the division—in a letter to the Superintendent of Irrigation, bearing date December 17, 1892, states: "I have gathered no statistics, as it would about double the expense of my office, and it was a question with the County Commissioners whether there was any law authorizing them to pay for such work." A majority of the more prominent canals heretofore noted are in this district, and cover an area of 300,000 acres. In 1890, 46,062 acres were reported as irrigated therefrom, no lands under the Otero and Bob creek canals being included in these figures. The President of the Colorado Land and Water Company recently gave the information at this office that about 16,000 acres were now in cultivation under the Bob creek.

Mr. Thomas Shideler, Water Commissioner of District No. 10, and Mr. J. F. Ramey, of District No. 19, make some pertinent remarks relative to defects in the irrigation laws, and the proneness of individuals to ignore the distinction between *meum* and *teum* when the officer's back is turned, which will be found under the headings of their respective districts.

Mr. McDaniel's report, as to existing conditions in his division, are herewith submitted:

HON. J. P. MAXWELL,
State Engineer,
Denver, Colorado.

SIR—I would respectfully refer you to my report of 1890, as still giving a resume of the embryotic status of affairs in this division.

I can scarcely qualify it in any particular, and the necessities for remedial legislation are glaringly apparent.

Districts No. 10, 11, 12 and 13. Conditions practically unchanged.

District No. 14. Decrees for this district were issued in May, 1892, some of which are subject to revision in the immediate future.

District No. 15. Decrees for this district were made in April, 1892, but a re-hearing has been ordered by the court, and the whole matter reopened for revision.

District No. 16. Decrees for that portion of this district, lying in the County of Pueblo, were issued in September, 1891.

Districts No. 17, 18, 19, 66 and 67 remain unchanged from my last report.

The supply of water from the Arkansas river and its tributaries has been unusually small during the past season, and early in August it became necessary through the active vigilance of the Water Commissioners to exercise the greatest economy in the distribution, which was continued quite to the end of a late irrigating season.

The Water Commissioners in Districts 14 and 17, were unable to make a just apportionment of water according to decrees on account of injunctions issued against the exercise of their manifest duties, as well as those of the Superintendent.

The existing laws are virtually inoperative from the fact that irrigation officers may be enjoined from a performance of their official duties during the time of a water famine, to the great damage and detriment of innocent and passive citizens, who are entitled to the protection of the State in the exercise of their manifest rights as declared in the Constitution of the State.

I would also respectfully submit that Superintendents and Water Commissioners should be given the legal counsel and aid of the respective District Attorneys, in order that important legal rights affecting vital interests of the people should not suffer from default or enforced inaction.

I remain your obedient servant,

JOHN W. MCDANIEL,

Superintendent Water Division No. 2.

Nepesta, Colo., December 1, 1892.

HON. J. P. MAXWELL,

State Engineer,

Denver, Colorado.

SIR—Supplemental to my report, and referring to legal obstructions to the performance of my necessary duty as Superintendent of Water Division No. 2, I would state that during the latter part of August an injunction was obtained in the District Court of Pueblo

County by The Colorado Land & Water Company restraining me from ordering any distribution of the water then being used by the said The Colorado Land & Water Company, on the grounds that it was needful for the crops then in process of seeding and maturing under the canal belonging to the said The Colorado Land & Water Company, and that there was sufficient water for all ditches of prior rights over and above the amount then being used by the said company, which said injunction being contested by The Rocky Ford, The Rocky Ford Highline, The Catlin and The Oxford Farmers' Canal Companies was dissolved in the latter part of September.

Also, Commissioner John W. Horgan, of Water District No. 14, was during the month of September served with writs of injunction from the Bessemer Ditch Company, the Pueblo Water Works, and the Pueblo Water Company, which he duly turned over to me.

Having no authority specific for such emergencies, and not being empowered to call upon the proper official attorneys for a defense of the interests and the rights of the people, I was powerless to properly execute the duties appertaining to my office, as well as protect rights guaranteed to the people who had in good faith complied with all the requirements defined within the statutes.

Before the expiration of the time for answering said injunction the Bessemer ditch closed for the necessary cleaning and repairs, and in that case no action was taken.

Regarding the suits of the Pueblo Water Works and the Pueblo Water Company, by the courtesy of the Attorney General, I was enabled to make answer, *the first*, denying capacity and appropriation equal to decree of priority, and to *the second*, demurrer that complaint does not show any decree from any court of jurisdiction, giving any priority to said company or ditch.

These cases are still undecided.

Therefore, it will be noted, that in and during a period of the least supply of water, I was, to a great, ex-

tent, estopped from a full and satisfactory performance of such duties as properly devolve upon this office.

I am, sir, very respectfully,

Your obedient servant,

JOHN. W. MCDANIEL,

Superintendent.

Nepesta, Colorado, December 20, 1892.

REPORT OF COMMISSIONER OF DISTRICT TEN.

COLORADO SPRINGS, Colo., October 29, 1892.

"I would respectfully report that I was called out on the 14th day of April, 1892, and served one hundred and thirteen (113) days, and had assistance eighty-seven (87) days.

"We had a small flow of water this season up to the 12th of October. I have had a great deal of trouble on account of ranchmen taking water in the night, when it was not due them. Locks are of no use in this District.

"In making up my report on crops I have to guess at it, as the ditch owners appear to think that I am trying to find out something to raise their taxes, and will not give me correct answers. So I have done the best I could on what ditches I have been called upon to look after. There are a great many ditches that I have not mentioned, from the fact that I have not been called upon to look after them, and because there is so much fault found about the expense of a Water Commissioner.

"This report is not satisfactory to me, and it may not be to you, but it is more than the people want to pay for."

THOMAS SHIDELER,

Commissioner.

IRRIGATION STATISTICS OF DIVISION NO. 2.

CONDENSED FROM THE REPORTS OF THE SEVERAL WATER COMMISSIONERS FOR THE YEAR 1892.

NO. OF DISTRICT.	Number of Ditches reported.	Total length as reported.	Average amount of water carried during the season, in cubic feet per second of time.	Number of acres that can be irrigated therefrom.	Number of acres of alfalfa irrigated.	Number of acres of seeded grasses other than alfalfa irrigated.	Number of acres of natural grasses irrigated.	Number of acres of other crops irrigated.	Number of acres of orchard irrigated.	Number of acres irrigated by seepage.	Number of acres irrigated from reservoirs.	Total number of acres irrigated.
10	65	172.75	272.50	22,138	3,970	2,026	5,826	4,682	---	175	---	16,679
11*	---	---	---	---	---	---	---	---	---	---	---	---
12	43	60.00	45.75	3,899	1,290	None	489	1,262	---	---	---	3,041
13*	---	---	---	---	---	---	---	---	---	---	---	---
14	31	236.10	811.00	52,784	4,542	520	4,438	5,340	---	22	---	14,862
15	51	89.50	103.20	12,865	1,468	253	1,511	1,986	---	---	---	5,218
16*	---	---	---	---	---	---	---	---	---	---	---	---
17*	---	---	---	---	---	---	---	---	---	---	---	---

*No report from Commissioner.

IRRIGATION STATISTICS OF DIVISION NO. 2.—*Concluded.*

NO. OF DISTRICT.	Number of ditches reported.	Total length as reported.	Average amount of water carried during the season in cubic feet per second of time.	Number of acres that can be irrigated therefrom.	Number of acres of alfalfa irrigated.	Number of acres of seeded grasses other than alfalfa irrigated.	Number of acres of natural grasses irrigated.	Number of acres of other crops irrigated.	Number of acres of orchard irrigated.	Number of acres irrigated by seepage.	Number of acres irrigated from reservoirs.	Total number of acres irrigated.
18*	---	---	---	---	---	---	---	---	---	---	---	---
19	22	106.50	No measuring flumes	27,010	3,315	---	1,205	5,125	---	---	---	9,645
49†	---	---	---	---	---	---	---	---	---	---	---	---
66†	---	---	---	---	---	---	---	---	---	---	---	---
67†	---	---	---	---	---	---	---	---	---	---	---	---
Totals 5 dist.	212	664.85	1,232.45	118,696	14,585	2,799	13,469	18,395	---	197	---	49,445

*No report from Commissioner.

†Water rights not yet adjudicated. No Commissioner appointed.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 10, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, THOMAS SHIDLER, COLORADO SPRINGS, COLO. APPOINTED 1887.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Underground Feeders to the Tom Wanless Ditch.....	Underground water	Jan. 3, 1891	Mar. 1, 1890	3.98	Wm. A. Strickler
The Underground Feeders to the Enterprise Ditch.....	Underflow of Monument creek }	Jan. 5, 1891	Dec. 28, 1890	29.70	The Enterprise Ditch Company
The enlargement and extension of the Frank Smith Ditch.....	Monument creek..	Jan. 10, 1891	Aug. 22, 1889	26.00	The Cascade Ice Company
The Cropper Ditch.....	East Squirrel creek	Jan. 27, 1891	Jan. 2, 1891	11.00	S. C. Stout
The Jones Park Ditch.....	North Fork of Cheyenne creek }	Jan. 27, 1891	Feb. 20, 1890	23.80	The City of Colorado Springs
The Womack Ditch.....	Little Fountain.....	Jan. 31, 1891	May 3, 1863	5.61	Eliza G. Womack
The Pike View Ditch and Pipe Line.....	Silver creek.....	April 3, 1891	Oct. 1, 1888	2.00	James Pope
The Button Ditch.....	West Monument creek.....	April 13, 1891	Feb. 20, 1891	7.10	C. B. Burton
The Granite Ditch.....	Deadman's creek.....	April 13, 1891	Jan. 16, 1891	28.35	James S. Shumacher
The Robey Ditch.....	Fountain creek.....	April 22, 1891	Feb. 18, 1891	41.63	Frank F. Roby
The Bruening Feeder No. 1.....	Cheyenne slough.....	May 22, 1891	April 14, 1891	5.32	John H. Bruening
The Bruening Feeder No. 2.....	Cheyenne slough.....	May 22, 1891	April 14, 1891	5.32	John H. Bruening
The Woolery Ditch, No. 1.....	Sand creek.....	May 22, 1891	Feb. 19, 1890	6.32	Henry J. Woolery

STATEMENT CONCERNING DITCHES—Concluded.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Sterling Ditch, No. 1.....	Springs.....	July 23, 1891	May 15, 1891	Not given.	Walter H. Sterling
The Sterling Ditch, No. 2.....	Springs.....	July 23, 1891	May 15, 1891	Not given	Walter H. Sterling
The Cornau Ditch, No. 2.....	Little Fountain.....	Aug. 4, 1891	July 3, 1890	7.80	A. H. Corman
The Crabb, No. 2.....	Seepage waters.....	Sept. 2, 1891	Aug. 1888	3.00	G. N. Crabb
The Crabb, No. 3.....	Seepage waters.....	Sept. 2, 1891	April, 1891	3.00	G. N. Crabb
The Malloy, No. 1.....	Springs.....	Sept. 2, 1891	April 16, 1891	12.77	Andrew Malloy
The Malloy, No. 2.....	Springs.....	Sept. 2, 1891	April 16, 1891	12.77	Andrew Malloy
The Fairview Ditch.....	Deadman's creek.....	Oct. 6, 1891	April 7, 1891	13.40	Mrs. A. G. Conrad
The Jones Park Ditch.....	North Cheyenne } creek.....	Nov. 14, 1891	Feb. 20, 1890	23.80	The City of Colorado Springs
The Fountain Underground Ditch and Pipe Line.....	Underground Res } ervoir Springs, etc }	Dec. 28, 1891	Dec. 23, 1891	50.00	E. B. Durfee
The Colorado Springs Water Works, Extension of Pipe Line.....	Ruxton creek.....	Feb. 13, 1892	Nov. 6,	26.84	
The Hoehing Ditch.....	Creek fed by springs.....	Mar. 28, 1892	Mar. 19, 1892	4.00	Henrietta Hoehing
The R. B. Sharp Ditch.....	McIntyre gulch.....	Apr. 18, 1892	Feb. 28, 1892	29.50	R. B. Sharp
The Grover Ditch.....	Talcott gulch creek.....	May 12, 1892	Feb. 15, 1892	4.20	Henrietta Hoehing
The Dixon Ditch.....	A spring.....	Nov. 28, 1892	Sep. 22, 1892	1.00	William Dixon

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 10. RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAMES OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Lake Joy Storage Reservoir	Fountain qui Bouille	Tom Wanless...	Jan. 3, 1891	Mar. 1, 1890	5,220,000	Wm. A. Strickler
The Kieffler Reservoir	Springs	Direct	Feb. 17, 1891	Jan. 5, 1891	1,620,000	A. R. Kieffler
The Pipe View Reservoir	Silver creek	Pike view	April 3, 1891	Oct. 1, 1888	275,654	James Pope
The Robey Reservoir	Fountain	Robey	April 22, 1891	Feb. 18, 1891	8,790,300	Frank F. Robey
The Bruening Reservoir No. 1	Cheyenne slough	{ Bruening feed- er No. 1. }	May 22, 1891	Dec. 11, 1890	18,744	John H. Bruening
The Bruening Reservoir No. 2.	Cheyenne slough	{ Bruening feed- er No. 2. }	May 22, 1891	Dec. 11, 1890	265,280	John H. Bruening
The Woolery Reservoir No. 1	Sand creek	Woolery No. 1...	May 22, 1891	Feb. 18, 1890	87,180	Henry J. Woolery
The Woolery Reservoir No. 2.	Spring branch	Built on stream.	May 22, 1891	Feb. 19, 1891	349,260	Henry J. Woolery
The Fountain Underground Reservoir	Underground waters	{ Fountain un- der ground. }	Dec. 28, 1891	Dec. 23, 1891	6,000	E. B. Durfee
The R. B. Sharp Reservoir No. 1	McIntyre gulch	Built on stream.	April 18, 1892	Feb. 28, 1892	975,000	R. B. Sharp
The R. B. Sharp Reservoir No. 2	McIntyre gulch	Built on stream.	April 18, 1892	Feb. 28, 1892	180,000	R. B. Sharp
The Dixon Reservoir	A Spring	Dixon	Nov. 28, 1892	Sep. 22, 1892	50,000	William Dixon

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 11, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, C. H. DEMAREST, PONCHA SPRINGS, COLO., APPOINTED AUGUST 19, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The McCann Ditch.....	Spring gulch.....	Jan. 6, 1891	Oct. 13, 1890	2.50	James McCann
The Silver Heel Ditch.....	Silver Heel creek.....	Feb. 24, 1891	Jan. 6, 1891	2.00	Leonard Adams
The Sebring Ditch.....	Chalk creek.....	March 5, 1891	Oct. 12, 1888	12.63	G. W. Sebring
The Spring Ditch.....	Springs 11-49-8.....	May 13, 1891	Mar. 21, 1891	6.00	Anna Bell Hutchinson
The Gustaph Shultz Ditch.....	Hudson creek.....	May 22, 1891	May 1, 1891	2.50	Gustaph Shultz
The Cramer Ditch.....	Half Moon creek.....	Sept. 4, 1891	June 8, 1891	10.00	H. H. Cramer
The Collins Ditch.....	Silver creek.....	Sept. 9, 1891	Nov. 1890	{ All of Sil- ver creek }	Wilkinson & Briggs
The Cramer Ditch.....	Half Moon creek.....	Sept. 17, 1891	June 8, 1891	10.00	H. E. and H. H. Cramer
The Lake Fork Pipe Line.....	Lake Fork.....	Sept. 19, 1891	June 19, 1891	10.00	{ The Leadville and Evergreen Lakes Electric Railway Company }
The Electric Railway Pipe Line.	Arkansas river.....	Sept. 19, 1891	June 24, 1891	10.00	
The Malta Pipe Line.....	California gulch.....	Sept. 19, 1891	June 15, 1861	25.00	George Morrison
The Park Ditch.....	Morrison creek.....	Oct. 30, 1891	Oct. 21, 1891	4.79	
The Muddy Ditch.....	{ Seepage & waste from Spald'g gulch }	{ Dec. 16, 1891	Oct. 15, 1891	2.00	Henry C. Donnell
The Thomas Jackson Ditch.....	Clear creek.....	Feb. 2, 1892	Not stated	26.04	Thomas Jackson
The Vincent Ditch.....	Gas creek.....	Feb. 17, 1892	Feb. 10, 1892	3.00	Vinton E. Fletcher

The Sunnyside Park Ditch, enlargement of the H. I. D. Ditch and Pipe Line.....	Arkansas river	May 16, 1892	Feb. 20, 1892	Orig. 1500 in. En. 52.00 c. f.	{	The Sunnyside Park Ditch Company
	Lake creek	June 1, 1892	May 23, 1892			
	Stream unnamed	Sept. 3, 1892	Feb. 10, 1882			
	Arkansas river	Oct. 14, 1892	Nov. 17, 1891			
The Reformatory Ditch.....	Dry creek	Oct. 14, 1892	Oct. 4, 1892	4.00	{	Ira DeWitt
The Ira DeWitt Ditch.....	Maxwell creek	Nov. 9, 1892	Nov. 7, 1888	3.33		
The Tompkins Ditch.....	Dry creek	Nov. 9, 1892	Nov. 17, 1891	6.75		
The Tompkins Ditch.....						
						H. S. Tompkins

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 11, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Silver Creek Reservoir	Silver creek	Collin's extens'n	Sep. 9, 1891	Nov. 1890	Not given	..... Wilkinson & Briggs
The Sugar Loaf Reservoir	Lake Fork	Built on stream..	Sep. 19, 1891	June 15, 1891	1,413,745,000	The Leadville & Evergreen Lakes Electric Railway Co.
The Upper Sugar Loaf Reserv'r	Lake Fork	Built on stream..	July 2, 1892	May 25, 1892	135,907,200	..... R. E. Goodale <i>et al.</i>

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO 12, RELATIVE TO WHICH, STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892—COMMISSIONER, JAMES T. LOCKE, CANON CITY, COLO. APPOINTED, 1889.

NAME OF DITCH OR CANAL.	Name of Stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Beaver Creek Pipe Line.....	{ Beaver and Boehmer creeks.....	Dec. 22, 1890	Sep. 27, 1890	5.57	-----The City of Colorado Springs
The Royal Gorge Canal.....	Arkansas river.....	Mar. 5, 1891	Feb. 25, 1891	460.00	-----A. R. Black
The Royal Gorge Canal.....	Arkansas river.....	May 23, 1891	May 19, 1891	594.00	-----A. R. Black, Amended Statement
The W. R. Voris Ditch.....	Brush creek.....	Aug. 10, 1891	July 1878	3.67	-----Thos. D. Balman
The Houle Ditch No. 4.....	West Brush creek.....	Jan. 21, 1892	June 1, 1866	0.54	-----Elizabeth Houle
The Houle Ditch No. 5.....	West Brush creek.....	Jan. 21, 1892	Jan. 15, 1890	4.80	-----Elizabeth Houle
The John Stoltz Irrigating Ditch.....	Oak creek.....	Jan. 27, 1892	May 31, 1881	1.50	-----John Stoltz
The Beaver Creek Mining and Milling Company's Ditch.....	West Beaver creek.....	Jan. 29, 1892	Jan. 9, 1892	10.00	-----The Beaver Creek Mining and Milling Co.
The Hancock Ditch.....	East Beaver creek.....	Feb. 13, 1892	Jan. 26, 1892	10.00	-----C. H. Hancock
The Mt. Rosa Ditch.....	Wilson creek.....	Mar. 2, 1892	Feb. 3, 1892	10.00	-----The Mt. Rosa Mining, Milling and Land Co.
The Bodfish Ditch.....	{ East branch of West Beaver c'k }	Mar. 18, 1892	Feb. 13, 1892	10.00	-----Geo. H. Bodfish
The Mullen Ditch.....	Springs.....	Apr. 13, 1892	Mar. 9, 1892	10.00	-----M. W. Mullen <i>et al.</i>
The Pueblo Canal.....	Arkansas river.....	Apr. 11, 1892	Jan. 15, 1892	1,536.00	-----C. H. Blake and sixteen others
The Jackson Ditch.....	Cherry creek.....	Apr. 18, 1892	Mar. 1, 1876	3.00	-----Geo. W. Jackson

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in the State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Mound City Ditch.....	Squaw creek.....	Aug. 5, 1892	May 11, 1892	6.12	.....Louis Youngmark, <i>et al.</i>
The King Ditch.....	Cottonwood creek	Aug. 12, 1892	April 10, 1888	1.50	.....Herman King
The Hyssong Ditch No. 1.....	Cottonwood creek	Aug. 12, 1892	June 1, 1890	2.00	.....John C. Hyssong
Amended Statement of the Mt. Rosa Ditch.....	Wilson creek.....	Sept. 16, 1892	May 26, 1892	10.00	The Mt. Rosa Mining, Milling & Land Company
The I. J. Dawson & J. C. Erickson Ditch.....	Texas creek.....	Nov. 21, 1892	May 24, 1892	2.00	.....I. J. Dawson & J. C. Erickson

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 12, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Beaver Creek Reservoir } No. 1.....	Beaver creek.....	Built on stream.	April 22, 1892	Jan. 20, 1891	4,177,268	{ ----- The Building, Loan, Town Lot, Water and Investment Company
The Dead Lake Reservoir.....	Beaver creek.....	Feeder ditch and pipe line.....	April 22, 1892	Jan. 21, 1891	945,000	
The Seven Lakes Reservoir.....	Drainage and nat- ural springs.....	Built on stream.	April 22, 1892	Jan. 19, 1891	85,987,439	
The Prospect Reservoir.....	W. Fork Wilson c'k	Built on stream.	Aug. 20, 1892	Aug. 19, 1892	9,217,760	----- Frederick A. Raynolds
The Fairview Reservoir.....	E. Fork Wilson c'k.	Built on stream.	Aug. 20, 1892	Aug. 19, 1892	6,882,880	----- Frederick A. Raynolds
The Ute Park Reservoir.....	Not stated.....	Not stated.....	Oct. 18, 1892	Feb. 10, 1892	Not given..	----- The Ute Park Imp. Co.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 13, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, WILL. J. ORANGE, SILVER CLIFF, COLO. APPOINTED 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Grape Creek Water Works and Irrigation Canal.....	Grape creek.....	Mar. 14, 1891	Mar. 9, 1891	60.00	-----A. R. Black
The Grape Creek Water Works and Irr'n Canal. Amen. State. }	Grape creek.....	May 23, 1891	Not stated...	Not given..	-----A. R. Black

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 13, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR,	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Freers Reservoir.....	Not stated	Not stated	Oct. 4, 1892	Not stated ...	933.333	.....L. H. Freer, (plat only)

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 14, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority.	Summation of decree to each ditch or canal.	Cubic feet of water previously appropriated in district.	Number on stream.	Order of priority in district.
The Toof Ditch	Fontaine qui Bouille	Feb. 20, 1860	4.00	---	---	---	1
The Warrant, Barnes and Baxter Ditch	Arkansas river	April, 1861	15.00	---	4.00	---	2
The Excelsior Ditch	Arkansas river	Dec. 1861	56.00	---	19.00	---	3
The Eder Ditch	Fontaine qui Bouille	Jan. 1, 1862	20.00	---	75.00	---	4
The Whipple Ditch	Fontaine qui Bouille	Mar. 15, 1862	4.00	---	95.00	---	5
The Greenview Ditch	Fontaine qui Bouille	Spring, 1862	2.50	---	99.00	---	6
The M. W. Steel Ditch	Fontaine qui Bouille	Mar. 1, 1863	1.00	---	101.50	---	7
The Keith, Warrant and Barnes Ditch	Arkansas river	April, 1863	30.00	---	102.50	---	8
The C. L. Barnard Ditch	Fontaine qui Bouille	Feb'y, 1864	0.50	---	132.50	---	9
The Booth Ditch	Arkansas river	April 1, 1864	23.80	---	133.00	---	10
The H. R. Steele Ditch	Fontaine qui Bouille	Feb. 1, 1865	2.00	---	156.80	---	11
The Cozzens Ditch	Fontaine qui Bouille	Feb. 10, 1866	2.00	---	158.80	---	12

The Wood Valley Ditch	Fontaine qui Bouille	Mar. 1, 1866	9.00	166.80	13
The J. W. Caulfield Ditch	Fontaine qui Bouille	Mar. 15, 1866	4.50	169.80	14
The Bannister Ditch	Fontaine qui Bouille	Latter part of 1866	7.00	174.30	15
The Arkansas Ditch	Arkansas river	Jan. 8, 1867	5.00	181.30	16
The Beuesch Ditch	Fontaine qui Bouille	Feb. 12, 1867	2.50	186.30	17
The Enterprise Ditch	Arkansas river	Fall. of 1867	20.00	188.80	18
The Sutherland Ditch	Fontaine qui Bouille	Feb. 15, 1868	3.00	208.80	19
The Olin Ditch	Fontaine qui Bouille	Dec. 15, 1868	2.66	211.80	20
The Cactus Ditch	Fontaine qui Bouille	Jan. 9, 1869	2.00	214.46	21
The McNeil Ditch	Fontaine qui Bouille	Feb'y, 1869	1.50	216.46	22
The Ballow Hill Ditch	Arkansas river	July 1, 1869	10.00	217.96	23
The Richie Ditch	Arkansas river	Spring, 1870	3.00	227.96	24
The Hamp-Bell Ditch	Arkansas river	Nov., 1870	6.00	230.96	25
The Barnum (also called Lewis Barnum) Ditch	Arkansas river	1870	6.00	236.96	26
The Brooks Ditch	Arkansas river	January, 1871	2.00	242.96	27
The Hobson Ditch	Arkansas river	March, 1871	2.00	244.96	28
The West Pueblo, formerly Mahoney, Ditch	Arkansas river	April 1, 1872	2.00	246.96	29
The Fields Ditch	Arkansas river	Spring, 1872	6.00	248.96	30
The Morey Ditch	Arkansas river	April 1, 1874	0.95	254.96	31
The Haden Ditch	Arkansas river	Oct. 1, 1878	0.95	255.91	32
The T. J. Steele Ditch	Fontaine qui Bouille	Feb. 1, 1880	1.00	256.86	33
The Collier Ditch	Arkansas river	May 4, 1881	19.00	257.86	34

STATEMENT CONCERNING DITCHES—Concluded.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Number on stream.	Order of priority in district.
The I. N. Sater Ditch	Arkansas river	June 20, 1881	3.00		276.86	—	35
The Greenview Ditch, enlargement	Fontaine qui Bouille	April, 1882	2.00	4.50	279.86	—	36
The Riverside Dairy Ditch	Arkansas river	Feb. 1, 1883	0.83		281.86	—	37
The Pueblo Water Company's Ditch	Arkansas river	April 22, 1884	22.66		282.69	—	38
The Chilcott Ditch	Fontaine qui Bouille	Mar. 10, 1885	5.00		305.35	—	39
The Ballow Hill Ditch, enlargement	Arkansas river	June, 1885	36.00	46.00	310.35	—	40
The Allen Ditch	Arkansas river	Mar. 1, 1886	6.00		346.35	—	41
The Hobson Ditch, enlargement	Arkansas river	April 1, 1886	4.00	6.00	352.35	—	42
The Oxford Farmers' Ditch, (an enlargement and extension of the Enterprise Ditch)	Arkansas river	Feb. 26, 1887	147.00		356.35	—	43
The Collier Ditch, extension	Arkansas river	Mar. 10, 1887	21.00	40.00	503.35	—	44
The McElroy Ditch	Fontaine qui Bouille	April 4, 1887	2.00		524.35	—	45
The Bessemer Ditch	Arkansas river	May 1, 1887	400.00		526.35	—	46
The Hobson No. 2 Ditch	Fontaine qui Bouille	June 10, 1887	23.20		926.35	—	47
The West Pueblo Ditch, Extension	Arkansas river	Dec. 17, 1887	16.00	18.00	949.55	—	48

The Muller & Goldsmith enlargement and extension of the Booth Ditch The Christian Fink enlargement of the Booth Ditch The Rocky Ford High Line Canal The Colorado Canal	Arkansas river	Mar. 30, 1888	7.00	13.00	965.55	49
	Arkansas river	Dec. 15, 1889	6.00	-----	972.55	50
	Arkansas river	Jan. 6, 1890	418.00	-----	978.55	51
	Arkansas river	June 9, 1890	756.28	-----	1,396.55	52
Total decreed in District					2,152.83	

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT No. 14, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE. DATE, OF DECREE, MAY 9, 1892.

NAME OF RESERVOIR.	Name of Stream from which water is taken.	Name of Ditch leading water thereto.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Greenview Reservoir	Fontaine qui Bouille	Greenview Ditch	1870	2,613,000	---	1
The Pueblo Water Company's Reservoir No. 1	Arkansas River	The Pueblo	Spring, 1885	679,000	2,613,000	2
The Pueblo Water Company's Reservoir No. 2	Arkansas River	Water Company's		767,180	3,292,000	3
The Pueblo Water Company's Reservoir No. 3	Arkansas River	Ditch.		955,441	4,059,180	4
The McElroy Reservoir	Fontaine qui Bouille	The McElroy Ditch	April 4, 1887	150,000	5,014,621	5
The Christian Fink Reservoir No. 1	Arkansas River	The Booth and	Dec. 15, 1889	1,609,973	5,164,621	6
The Christian Fink Reservoir No. 2	Arkansas River	Christian Fink		163,390	5,328,011	7
The Christian Fink Reservoir No. 3	Arkansas River	Extension Ditch.		234,703	5,562,714	8
The Bessemer No. 9 Reservoir	Arkansas River	The Bessemer Ditch	Feb. 7, 1891	38,500,000	5,797,417	9
The Olin Reservoir No. 1	Fontaine qui Bouille	The Olin Ditch	Novem. 1891	180,000	44,297,417	10
The Olin Reservoir No. 2	Fontaine qui Bouille			180,000	44,477,417	11
Total decreed in District				44,657,417	---	

STATEMENT CONCERNING DITCHES

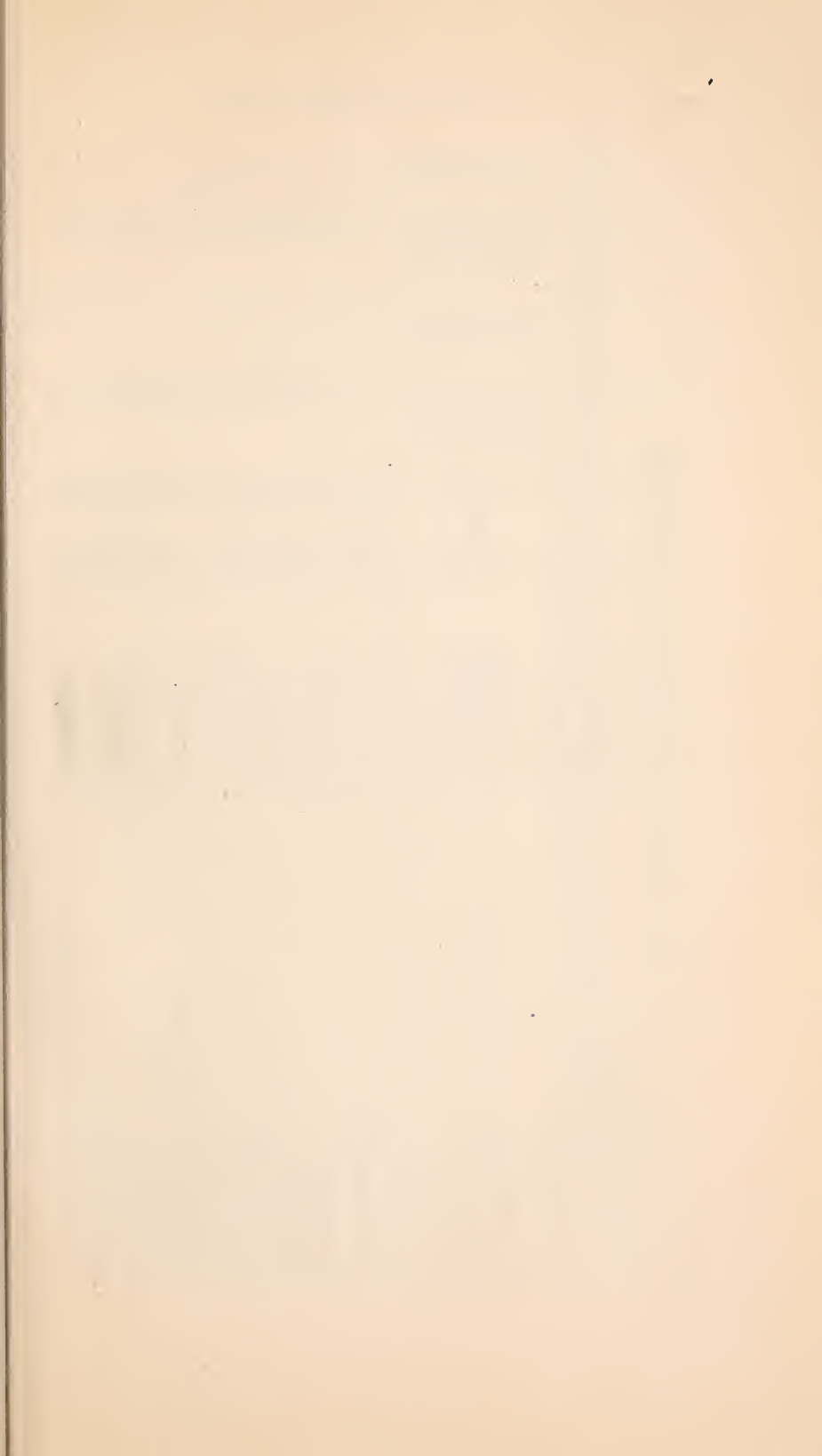
IN WATER DISTRICT NO. 14, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED—COMMISSIONER, W. HORGAN, PUEBLO, COLO. APPOINTED 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Upper Long Branch	Springs in Long Branch	April 30, 1891	Mar. 1891	3.30	J. J. Haruff
The Long Branch Ditch			1884	3.30	
The Hill Ditch			1872	3.30	
The Squirrel Creek Ditch	Squirrel creek	May 25, 1892	April 13, 1892	13.20	F. L. Rouse

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 14, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of Ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAME'S OF CLAIMANTS.
The White Reservoir	Springs.	Feeder ditch	Jan. 27, 1891	Not stated	94,000	R. H. White
The Haruff Reservoir System	{ Long Branch and springs	{ Lg. Branch, Up- per Lg. Branch and Hill Dchs	April 30, 1891	Not stated.	2,158,750	J. J. Haruff
The Squirrel Creek Reservoir.	Squirrel creek.	{ Squirrel creek ditch	May 25, 1892	April 13, 1892	1,200,000	F. L. Rouse



STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 15, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Hicklin Ditch "A"	Greenhorn creek	Spring, 1859	0.60	---	---	1
The Hicklin Ditch "B"	Greenhorn creek	Spring, 1859	1.80	---	0.60	2
The Suttles Ditch	St. Charles river	Fall, 1861	2.00	---	2.40	3
The Eagle Ditch	St. Charles river	Winter 1861-2	2.00	---	4.40	4
The McDowell Ditch	St. Charles river	Feb. 28, 1862	3.00	---	6.40	5
The McDaniel Ditch No. 2	Big Graneros creek	June 1, 1862	0.40	---	9.40	6
The Hicklin Ditch "D"	Greenhorn creek	1862	0.40	---	9.80	7
The Fairhurst Ditch (formerly Babcock).	St. Charles river	June, 1863	1.80	---	10.20	8
The Tucker Ditch	St. Charles river	April 1, 1864	1.00	---	12.00	9
The Fisher Ditch	St. Charles river	May 1, 1864	0.70	---	13.00	10
The Greenhorn Canon Ditch	Greenhorn creek	April, 1865	2.00	---	13.70	11
The Extension of the Greenhorn Canon Ditch	Greenhorn creek	April, 1865	1.30	3.30	15.70	12

The Dotson Ditch No. 1	St. Charles river	May, 1865	3.00	17.00	13
The Grayback Ditch	St. Charles river	Spring, 1865	2.00	20.00	14
The Hickland Ditch	Big Graneros creek	March 5, 1866	5.00	22.00	15
The Wagner Ditch	St. Charles river	March, 1866	2.00	27.00	16
The Rautschler Ditch	Greenhorn creek	April 1, 1866	4.00	29.00	17
The Hicklin Ditch "C"	Greenhorn creek	Spring, 1866	2.00	33.00	18
The First Enlargement of the Dotson Ditch	St. Charles river	Spring, 1866	3.00	35.00	19
The Pioneer Ditch (on Middle Creek)	Middle creek	June, 1866	5.00	38.00	20
The Sease Ditch	Middle creek	June, 1866	1.60	43.00	21
The Pollard Ditch	St. Charles river	Dec. 15, 1866	6.00	44.60	22
The Zoeller Ditch	St. Charles river	Winter 1866-7	5.00	50.60	23
The Blunt Ditch No. 1	St. Charles river	Jan. 8, 1867	4.00	55.00	24
The Blunt Ditch No. 2	St. Charles river	Jan. 8, 1867	2.50	59.00	25
The Chase Ditch	St. Charles river	Dec. 1867	2.00	61.50	26
The Edson Ditch	St. Charles river	Winter 1867-8	1.20	63.50	27
The Jamison Ditch	Greenhorn creek	April 1, 1868	2.30	64.70	28
The Lloyd Ditch	Greenhorn creek	April 1, 1868	3.40	67.00	29
The Marshall Ditch	Greenhorn creek	April 1, 1868	1.70	70.40	30
The Scroggs Ditch	Greenhorn creek	Mid Apr, 1868	2.20	72.10	31
The Smith, Austin & Pierson Ditch	Big Graneros creek	May, 1868	7.00	74.30	32
The Second Enlargement of the Dotson Ditch	St. Charles river	Spring, 1868	30.00	81.30	33
The Finlay Ditch	Greenhorn creek	Spring, 1868	0.80	101.30	34

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Mexican Ditch	St. Charles river	June, 1868	4.00		102.10	35
The Anderson Ditch	St. Charles river	Jan. 15, 1869	3.00		106.10	36
The High Line Ditch	Greenhorn creek	March 1, 1869	10.00		109.10	37
The Bruner Ditch	St. Charles river	Spring, 1869	1.60		119.10	38
The Crawford & Smythe (formerly O'Donnell) Ditch	Greenhorn creek	July 1, 1869	2.00		120.70	39
The A. J. Lamb Ditch	Greenhorn creek	July 1, 1869	4.00		122.70	40
The Bryson No. 1 Ditch	St. Charles river	Jan. 2, 1870	6.00		126.70	41
The Graneros Canon Ditch	Graneros creek	May 1, 1870	2.00		132.70	42
The Porcupine Ditch	Middle creek	April 1, 1871	0.40		134.70	43
The Woodlawn Ditch	Big Graneros creek	April 1, 1871	10.00		135.10	44
The Greenhorn Valley Ditch	Greenhorn creek	April 1, 1871	2.40		145.10	45
The McDaniel No. 1 Ditch	Big Graneros creek	April 15, 1871	1.00		147.50	46
The Pioneer (on Little Graneros) Ditch	Little Graneros creek	April 25, 1871	0.60		148.50	47
The Carter Ditch	Big Graneros creek	May 16, 1871	1.80		149.10	48
The Ashbaugh Ditch	North Muddy creek	Spring, 1871	0.25		150.90	49

The Dean Ditch	North Branch Muddy ck	June 1, 1871	1.60	151.15	50
The Nichols Ditch "A"	South Branch Muddy ck	Aug. 1, 1871	1.50	152.75	51
The Nichols Ditch "C"	South Branch Muddy ck	Fall, 1871	4.00	154.25	52
The Blunt Ditch No. 3	St. Charles river	Fall, 1871	4.00	158.25	53
The Stanley Ditch No. 1	Greenhorn creek	March, 1872	3.00	162.25	54
The Mesa Ditch	A Spring branch	May 15, 1872	0.80	165.25	55
The Nichols Ditch "B"	South Fork Muddy creek	May, 1872	0.60	166.05	56
The Stanley Ditch No. 2	Greenhorn creek	Spring, 1872	4.00	166.65	57
The Pioneer (on Middle Creek) Extension Ditch	Middle creek	Spring, 1872	1.20	170.65	58
The Schurtz Ditch	Greenhorn creek	June 10, 1872	2.80	171.85	59
The Dunbaugh Ditch	Greenhorn creek	Oct. 15, 1872	1.30	174.65	60
The Mills Ditch	Greenhorn creek	Oct. 15, 1872	0.70	175.95	61
The Crawford & Smythe Ditch (enlargement)	Greenhorn creek	Nov. 1, 1872	1.80	176.65	62
The Monitor Ditch (formerly Bryson & Nichols)	Greenhorn creek	Fall, 1872	3.00	178.40	63
The South Muddy Ditch	South Muddy creek	1872	0.40	181.40	64
The Waldron Ditch	Little Graneros creek	May 1, 1873	1.00	181.80	65
The McCarty Ditch	Middle Muddy creek	May, 1873	0.25	182.80	66
The Davis Ditch	Greenhorn creek	June 1, 1873	2.00	183.05	67
The Robinson Ditch	Greenhorn creek	June 1, 1873	5.50	185.05	68
The Standard Ditch	North Muddy creek	Last of Jun 73	4.00	190.55	69
The Sease Ditch	Middle creek	Nov. 1, 1873	1.60	194.55	70

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water appropriated previously in district.	Order of priority in district.
The James E. Smith Ditch	Greenhorn creek	Nov. 1, 1873	4.00	—	196.15	71
The Dotson No. 2 Ditch	St. Charles river	March 1, 1874	3.00	—	200.15	72
The Yellow Bank Ditch	South Muddy creek	June 1, 1874	0.25	—	203.15	73
The Evergreen Ditch	Big Graneros creek	June 15, 1874	4.00	—	203.40	74
The Cold Spring Ditch	Spring branch	Summer 1874	0.40	—	207.40	75
The McCausland Ditch	St. Charles river	Dec. 1874	2.00	—	207.80	76
The Middle Muddy Ditch	Middle Muddy creek	May, 1875	0.80	—	208.60	77
The Goss Ditch	Greenhorn & Spring bh	April, 1876	0.33	—	209.40	78
The Centennial Ditch	Greenhorn creek	May 19, 1876	1.60	—	209.73	79
The J. B. Garrish Ditch	St. Charles river	June 1, 1876	0.50	—	211.33	80
The St. Charles Ditch	St. Charles river	August, 1876	120.00	—	211.83	81
The Standard Ditch, extension	North Muddy creek	May 15, 1877	1.20	—	331.83	82
The Domestic Ditch	South Muddy creek	May, 1877	0.25	—	333.03	83
The Brannan-Crawford Ditch	Greenhorn creek	F. or Mc, 1878	1.80	—	333.28	84
The Greenhorn High Line Ditch	Greenhorn creek	March 1, 1879	8.00	—	335.08	85

The Mesa Ditch, extension	A Spring branch	May 1, 1879	1.60	343.08	86
The McDaniel Ditch, No. 3	Little Graneros creek	Lat. part 1879	0.50	344.68	87
The Garden Ditch	Spring branch	May 15, 1880	1.00	345.18	88
The Merrimac Ditch	Greenhorn creek	May 16, 1880	1.00	346.18	89
The North Muddy Ditch	North Muddy creek	April, 1881	0.25	347.18	90
The Bryson Ditch	St. Charles river	October, 1883	20.00	347.43	91
The Braunan Ditch (formerly Taylor)	Greenhorn creek	March 1, 1884	1.40	367.43	92
The Graneros Ditch	Little Graneros creek	April 1, 1884	1.25	368.83	93
The Bonniemeade Extension of the Greenhorn Valley Ditch	Greenhorn creek	April 1, 1884	2.70	370.03	94
The Smythe Ditch	Greenhorn creek	Dec. 1, 1884	2.50	372.73	95
The Tucker Ditch, enlargement	St. Charles river	March 1, 1885	1.00	374.23	96
The Hicklin Grant Ditch "A," extension	Greenhorn creek	April, 1885	1.20	375.23	97
The O'Brien & Harrison Ditch	Little Muddy creek	January, 1886	3.00	376.43	98
The Stanley Ditch, No. 3	Muddy creek	Spring, 1887	2.40	379.43	99
The Snow Slide Ditch	South St. Charles river	July 6, 1888	15.00	381.83	100
The Cold Spring Ditch, enlargement	Spring branch	Summer, 1888	0.40	396.83	101
The Brown Ditch	St. Charles river	Feb., 1890	1.40	397.23	102
The Patton Ditch	Middle creek	May 1, 1891	0.50	398.63	103

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO 15, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE. DATE OF DECREE, APRIL 16, 1892.

NAME OF RESERVOIR	Name of stream from which water is taken.	Name of ditch leading water thereto.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Chase Reservoir	St. Charles river	The Chase ditch	1868	100,000	100,000	1
The Minnequa Reservoir	St. Charles river	The St. Charles ditch	1876	60,000,000	100,000	2
The Hickland } No. 2 Reservoirs, } No. 3	Big Graneros creek	The Hickland ditch	Mar. 1, 1885 Mar. 15, 1885	266,672	60,100,000	3
				113,400	60,366,672	4
The Bonniemeade Lake Reservoir.	Greenhorn creek	The Greenhorn and Bonniemeade exten.	1886	8,574,160	60,580,672	5
				1,000,000	69,154,232	6
The St. Charles No. 2 Reservoir	St. Charles ditch	St. Charles river	Summer 1890	1,000,000	69,154,232	
Total decreed in district					70,154,232	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 15, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.—COMMISSIONER A. H. SMITH, PUEBLO, COLORADO. APPOINTED 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Savage Ditch.....	St. Charles river.....	June 19, 1891	June 18, 1891	10.00	..... Savage and McCarthy
The Snowslide Ditch.....	Squirrel creek.....	Nov. 27, 1891	June 6, 1889	40.00	..... Alex. Miller <i>et al.</i>
The Bonniemeade Extens'n Ditch.....	Greenhorn creek.....	Dec. 11, 1891	April 1, 1886	16.31	..... Ella and Z. T. McDaniel

STATEMENT CONCERNING DITCHES

IN THAT PART OF WATER DISTRICT No. 16, LYING IN PUEBLO COUNTY, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THAT PART OF SAID DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Doyle Ditch.....	Huerfano river.....	Spring, 1859	11.00	-----	-----	A
The Daggett Ditch.....	Huerfano river.....	Spring, 1860	31.00	-----	11.00	B
The Fryer Ditch.....	Huerfano river.....	Spring, 1862	24.61	-----	45.20	3 ^a
The Dog Town Ditch.....	Huerfano river.....	Winter, 1862	14.30	-----	71.11	4 ^a
The Field Ditch.....	Huerfano river.....	January, 1863	8.00	-----	85.41	4 ^b
The Welton Ditch.....	Huerfano river.....	Early winter, 1863	42.00	-----	93.41	4 ^c
The Hermosilla Ditch.....	Huerfano river.....	April 25, 1863	72.00	-----	138.61	5 ^a
The Kinsey Ditch.....	Huerfano river.....	April 15, 1874	8.50	-----	410.43	97 ^a
The Kinsey Ditch, first enlargement.....	Huerfano river.....	April, 1885	10.50	-----	514.73	156 ^a
The Field Ditch, enlargement.....	Huerfano river.....	August, 1885	17.16	-----	525.23	156 ^b

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Huerfano Valley Ditch	Huerfano river	Dec. 31, 1887	74.00	...	564.65	167 ^a
The Ellis Ditch	Huerfano river	Dec. 12, 1888	22.00	...	714.81	178
Total decreed to Ditches in district			...		736.81	

NOTE.—The last two columns in the above table were compiled in the State Engineer's office, in connection with the decree for that part of this district lying in Huerfano County. See page 300, Fifth Biennial Report of State Engineer, 1889-90.

STATEMENT CONCERNING RESERVOIRS

IN THAT PART OF WATER DISTRICT NO. 16, LYING IN PUEBLO COUNTY, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

NAME OF RESERVOIR.	Name of stream from which water is taken.	Name of ditch leading water thereto.	Date of appropriation.	Cubic feet of water per second decreed to each priority.		Cubic feet of water previously appropriated in district.	Order of priority in district.
The Huerfano Valley Reservoir	Huerfano river	Huerfano Val. Ditch	Dec. 31, 1887	87,855,600		1,682,991	3
The "J. J. Ellis" Reservoir	Huerfano river	Ellis ditch	Fall, 1889	450,000		89,537,991	4
The "Fields & McMillan" Reservoir	Huerfano river	Ellis ditch	Fall, 1889	1,045,000		89,987,991	5
Total decreed to Reservoirs in this district							91,032,991

NOTE.—The last two columns in the above table were compiled in the State Engineer's office, in connection with the decree for that part of this district lying in Huerfano County. See page 311, Fifth Biennial Report of State Engineer, 1889-90.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 16, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.—COMMISSIONER, H. B. JONES, ST. MARYS, COLO. APPOINTED JULY 19, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Pachaco Ditch	Cuecharas creek	Dec. 11, 1890	Nov. 1884	17.40	John B. Pachaco <i>et al.</i>
The Vigil Ditch	Cuecharas creek	Dec. 11, 1890	1874	35.14	Francisco Vigil <i>et al.</i>
The Botts Ditch	Muddy creek	Jan. 23, 1891	Not stated	Not given	David Botts
The Emerson Ditch	Bluff creek	April 8, 1891	Not stated	1.25	J. W. Emerson
The Emerson Reservoir Ditch	Bluff creek	April 8, 1891	Not stated	1.50	J. W. Emerson
The Pope Brothers Ditch	Huerfano river through Boyce D	April 16, 1891	Oct. 15, 1888	12.00	Hamilton Pope and J W Pope
The Pope Brothers Enlargement of the Boyce Ditch	Huerfano River	April 16, 1891	Not stated	12.00	Hamilton Pope and J W Pope
The Petty & Robinson Ditch	Greaser ditch	April 22, 1891	Not stated	3.00	Robinson & Petty
The Robinson Ditch	Muddy creek	April 22, 1891	Not stated	Not given	J W Robinson
The Tom Branch Ditch	Tom Branch creek	April 23, 1891	July 15, 1890	68.00	Pope & Beckwith
The Mexican Branch Ditch	Mexican Br'ch c'k	April 23, 1891	July 13, 1890	68.00	Pope & Beckwith
The Extension of the Tom Branch and Mexican Branch Ditches	Tom and Mexican Branch creeks	April 23, 1891	July 18, 1890	Not given	Pope & Beckwith
The Greasewood Hollow Ditch	Springs on 17.20 S	April 23, 1891	Oct. 15, 1890	All the flow of springs	Henry Showman

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Gomez First Enlargement Ditch	Cucharas creek	June 6, 1891	April 20, 1891	40.00	John F. Read
The Davis Botts Ditch	Muddy creek	June 11, 1891	Nov. 1, 1888	3.00	David F. Botts
The St. Clair Ditch	Cucharas creek	June 13, 1891	June 3, 1891	5.42	Clara C. Martin
The Edmiston Ditch	Cucharas creek	June 22, 1891	1872	2.00	A. H. Edmiston
The Hogback Ditch	Cucharas creek	June 22, 1891	March 1, 1890	3.00	Hayes & Crumley
The Lone Pine Ditch	Cucharas creek	June 22, 1891	May, 1876	Not given	George W. Kitchen
The Edmiston & Estes Ditch	Cucharas creek	June 22, 1891	April, 1872	2.25	Edmiston & Estes
The Mexican Ditch	Mexican B'nch c'k	June 26, 1891	July 13, 1890	68.00	James Beckwith
The Mexican Ditch and Tom Ditch Extension	Mexican B'nch c'k	June 26, 1891	July 17, 1890	72.50	James Beckwith
The Tom Branch Ditch	Tom Branch creek	June 26, 1891	July 19, 1890	68.00	James Beckwith
The Lamb Ditch	Huerfano river thro' Martinez ditch.	{ July 1, 1891	April 11, 1891	6.50	Thomas Lamb <i>et al.</i>
The Enlargement of the Martinez Ditch	Huerfano river	July 1, 1891	April 11, 1891	6.50	Thomas Lamb <i>et al.</i>
The Sheep Mountain Ditch	Spring Run creek	July 1, 1891	Jan. 3, 1891	4.10	Candido Garcia
The Piedras Amarillas Ditch	Oak creek	July 18, 1891	April 1867	12.86	Antonio Maria Martinez
The Gonzalez Ditch	Oak creek	July 20, 1891	July 11, 1891	12.86	Henry Gordon

The Louis Sporleder Ditch				Oct. 27, 1890	36.33	August F. Unfug
The Northside Ditch	{ North fork of Santa Clara creek }			Oct. 27, 1890	4.53	August F. Unfug
The Southside Ditch				Oct. 27, 1890	4.53	August F. Unfug
The Extension of Mahan Ditch			Aug. 8, 1891	Jan. 7, 1889	5.37	Jones & Patterson
The Denis Pass Creek Ditch	Huerfano river		Aug. 11, 1891	May 1, 1870	2.00	Charles Deus
The Canon Colorow Ditch	Pass creek		Aug. 18, 1891	April, 1884	12.86	Manuel Pino
The Vigil Ditch	Arroya Colorow		Aug. 18, 1891	1866	12.66	Edwin W. Baxter
The Gross Canal	Oak creek		Aug. 18, 1891	July 7, 1891	228.00	W. A. Gross
The Mountain View Ditch	Huerfano river		Aug. 18, 1891	June, 1885	4.00	F. M. Owenburg
The Mountain View Ditch, First Extension	Middle creek		Sept. 3, 1891	Aug. 18, 1891	3.36	F. M. Owenburg
	Middle creek		Sept. 3, 1891	Spring, 1875	.50	Win. Lazendorfer
The Poison Canon Ditch	Poison Canon creek		Sept. 21, 1891	Oct. 26, 1891	7.25	L. B. Sporleder
The Sporleder Ditch	Cucharas river		Nov. 25, 1891	Aug. 18, 1891	3.36	F. M. Owenburg
The First Extension of the Mountain View Ditch	Middle river		Oct. 8, 1891	July 27, 1891	7.61	Charles E. Armstrong
	North Apache creek		Oct. 10, 1891	July 27, 1891	7.61	Charles E. Armstrong
The Armstrong-Ogle Ditch	North Apache creek		Oct. 10, 1891	Mar. 20, 1891	68.00	Hamilton Pope
The Armstrong-Ogle Ditch	Apache creek		Dec. 10, 1891	May, 1868	30.00	Louis N. Harnes
The Ute Ditch	Springs		Mar. 28, 1892	Feb. 24, 1892	167.44	F. E. Torbit <i>et al.</i>
The Louis N. Harnes Ditch	Underflow of Huerfano river		April 8, 1892	Oct. 28, 1889	44.00	Chas. N. Hockaday
The Junita Canal.	Six Mile Arroya		April 18, 1892	April 12, 1892	5.00	John Meyer
The Hockaday Ditch	Greaser creek		May 31, 1892	June, 1878	15.00	Miguel A. Vigil
The J. M. Ditch	{ South fork of North Branch of Bear creek }		June 2, 1892	June, 1875	15.00	Miguel A. Vigil
The South Ditch No. 1			June 2, 1892			
The North Ditch No. 2						

STATEMENT CONCERNING DITCHES.—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity, claimed in cubic feet.	NAMES OF CLAIMANTS.
The J. S. Mackey Ditch	Spring creek	June 16, 1892	June 5, 1888	1.00	J. S. Mackey
The Enlargement of the Hudson Ditch	Medano creek	Oct. 17, 1892	June 18, 1892	18.97	W. L. Murray <i>et al.</i>
The Medano Ditch	Medano creek	Oct. 17, 1892	Sep. 22, 1892	27.92	R. M. Brockman <i>et al.</i>
The "C. W." Ditch	Bruff creek	Oct. 17, 1892	July 28, 1892	3.00	Charles Wolf
The Fink Ditch	Williams creek	Nov. 23, 1892	March, 1869	2.95	William T. Fink

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 16, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of Ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Stevens Reservoir	Cucharas creek	Duran ditch	Jan. 12, 1891	1887	54,885,600	W. V. Stevens
The Emerson Reservoir.	Bluff creek	{ Emerson's Re- servoir ditch } { Boyce and Pope ditch } { J. W. Robinson ditch }	April 8, 1891	Not stated.	Not given	J. W. Emerson
The Pope Reservoir	Huerfano river		April 16, 1891	Oct. 15, 1888	4,024,238	Hamilton Pope
The J. W. Robinson Reservoir	Muddy creek		April 22, 1891	Not stated	2,000,000	J. W. Robinson
The David Botts Reservoir	Muddy creek	David Botts ditch	Jan. 11, 1891	Nov. 1, 1888	96,000	David F. Botts
The St. Clair Reservoir	Cucharas river	St. Clair ditch	Jan. 13, 1891	Jan. 3, 1891	2,058,210	Clara C. Martin
The Mahan Extension Reservoir	Huerfano river	{ Mahan and Ex- tension ditch }	Aug. 8, 1891	Jan. 7, 1889	191,445,034	Jones & Pattison
The Gross Reservoir No. 2	Huerfano river	Gross canal.	Aug. 18, 1891	July 7, 1891	52,707,600	W. A. Gross
The Gross Reservoir No. 3.	Huerfano river	Gross canal.	Aug. 18, 1891	July 7, 1891	67,953,600	W. A. Gross
The Gross Reservoir No. 4	Huerfano river	Gross canal.	Aug. 18, 1891	July 7, 1891	1,672,704,000	W. A. Gross
The Mountain View Reservoir	Middle creek	{ Mountain View ditch }	Sept. 3, 1891	Aug. 18, 1891	598,545	
The Armstrong Reservoir No. 1	North Apache creek	{ Armstrong- Ogle ditch }	Oct. 10, 1891	July 27, 1891	879,300	Charles E. Armstrong
The Armstrong Reservoir No. 2	North Apache creek	Same	Oct. 10, 1891	July 27, 1891	555,788	Charles E. Armstrong
The Armstrong Reservoir No. 3	North Apache creek	Same.	Oct. 10, 1891	July 27, 1891	627,927	Charles E. Armstrong

STATEMENT CONCERNING RESERVOIRS—*Concluded.*

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Armstrong Reservoir No. 4	North Apache creek	{ Armstrong } Ogle ditch	Oct. 10, 1891	July 27, 1891	531,511	Charles F. Armstrong
The Hockaday Reservoir	Six Mile arroyo.	Hockaday ditch.	April 18, 1892	Oct. 29, 1889	250,000	Charles N. Hockaday
The J. M. Reservoir	Greaser creek.	J. M. ditch	May 31, 1892	April 12, 1892	6,547,795	John Meyer
The "C. W." Reservoir	Bruff creek	C. W. ditch.	Oct. 17, 1892	July 28, 1892	1,800,000	Charles Wolf

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 17, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER GEORGE PECK, LAS ANIMAS, COLORADO. APPOINTED, 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Bob Creek Canal	Bob creek	Dec. 15, 1890	Nov. 26, 1890	62.00	The Bob Creek Land & Water Company
The W. J. Barker Ditch	Arkansas river	Dec. 20, 1890	Oct. 20, 1890	15.15	W. J. Barker
The A. J. Anderson Ditch	Crooked arroya	Jan. 5, 1891	Mar. 10, 1888	6.81	Albert J. Anderson
The Underground Feeders to the Gilpin Ditch	Horse creek	Jan. 10, 1891	Mar. 19, 1890	32.50	Francis E. Gilpin
The Kitchen Ditch	Sand Arroya creek	Feb. 27, 1891	Feb. 6, 1891	5.44	Charles W. Kitchen
The Arlington Canal	Adobe creek	Feb. 27, 1891	Dec. 7, 1890	26.68	The Arlington Farm & Irrigation Company
The Abe Peterson Ditch	Arkansas river	April 16, 1891	April 1873	70.00	A. Peterson
Holt Live Stock Co.'s Ditch No. 1	Horse creek	April 16, 1891	Dec. 20, 1886	4.00	The Holt Live Stock Company
Holt Live Stock Co.'s Ditch No. 2	N. Park Horse cr'k	April 21, 1891	Dec. 20, 1886	9.00	The Holt Live Stock Company
Holt Live Stock Co.'s Ditch No. 3	Horse creek	April 21, 1891	Dec. 20, 1886	4.00	The Holt Live Stock Company
Holt Live Stock Co.'s Ditch No. 4	Deadman's creek	April 21, 1891	Dec. 20, 1886	7.00	The Holt Live Stock Company
Holt Live Stock Co.'s Ditch No. 5	Deadman's creek	April 21, 1891	Dec. 20, 1886	6.00	The Holt Live Stock Company
Holt Live Stock Co.'s Ditch No. 6	Horse creek	April 21, 1891	Dec. 20, 1886	7.00	The Holt Live Stock Company
Holt Live Stock Co.'s Ditch No. 7	Rush creek	April 21, 1891	Dec. 20, 1886	5.00	The Holt Live Stock Company

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
Holt Live Stock Co.'s Ditch No. 8	Rush creek	April 21, 1891	Dec. 20, 1886	5.50	The Holt Live Stock Company
Holt Live Stock Co.'s Ditch No. 9	Roy creek	April 21, 1891	Dec. 20, 1886	Not given	The Holt Live Stock Company
The Poinster Ditch	Anderson arroya	May 6, 1891	May 1, 1891	6.20	J. F. Poinster
The Brooker Arroya Ditch	Anderson arroya	June 15, 1891	April 31, 1891	5.00	Alfred Brooker
The Thurmond Arroya Ditch	Thurmond arroya	June 15, 1891	April 1, 1891	2.00	Alfred Brooker
The Tempas Creek Ditch	Tempas creek	June 23, 1891	May 18, 1891	51.84	The Tempas Creek Company
The Floodwater Ditch from—	Sand arroya	July 2, 1891	April 27, 1891	63.00	M. F. Houston, <i>et al.</i>
The Poinster Ditch No. 2	Anderson arroya	Mar. 22, 1892	Mar. 11, 1892	3.21	Joseph F. Poinster
The Green Ditch	Horse creek	Mar. 24, 1892	Jan. 29, 1892	100.00	A. R. Wait
The Lauckton Ditch	King arroya	Mar. 29, 1892	Mar. 1, 1892	5.24	George L. Lauckton
The Canaday Ditch	Horse creek	April 9, 1892	Jan. 18, 1892	56.73	J. R. Canaday
The Relief Ditch	A ravine	April 23, 1892	Feb. 16, 1892	20.00	S. W. Cressey
The Proposed Extension of the Riverside Ditch	Arkansas river	April 28, 1892	Feb. 14, 1892	11.81	The Riverside Extension Ditch Company
The Supply Ditch	Horse creek	Aug. 16, 1892	May 18, 1892	575.62	S. W. Cressey & J. R. Canaday

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 17, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Arlington Reservoir	Adobe creek	Arlington ditch	Feb. 27, 1891	Dec. 7, 1890	28,600,000	{ The Arlington Farm and Irrigation Co.
{ The Colorado Land and Reservoir Co.'s Reservoir No. 1 }	Arkansas river	Colorado canal	Aug. 26, 1891	April, 9, 1889	133,890,000	{ The Colorado Land and Reservoir Co.
{ The Colorado Land and Reservoir Co.'s Reservoir No. 2 }	Arkansas river	Colorado canal	Aug. 26, 1891	April 9, 1889	665,818,630	{ The Colorado Land and Reservoir Co.
{ The Colorado Land and Reservoir Co.'s Reservoir No. 3 }	Arkansas river	Colorado canal	Aug. 26, 1891	April 9, 1889	14,869,641,600	{ The Colorado Land and Reservoir Co.
{ The Colorado Land and Reservoir Co.'s Lake May }	Arkansas river	Colorado canal	Aug. 26, 1891	April 9, 1889	32,125,500	{ The Colorado Land and Reservoir Co.
{ The Colorado Land and Reservoir Co.'s Lake Lolita }	Arkansas river	Colorado canal	Aug. 26, 1891	April 9, 1889	75,467,700	{ The Colorado Land and Reservoir Co.
{ The Colorado Land and Reservoir Co.'s Lake Mouse }	Arkansas river	Colorado canal	Aug. 26, 1891	April 9, 1889	5,150,970	{ The Colorado Land and Reservoir Co.
{ The Colorado Land and Reservoir Co.'s Lake Hannah }	Arkansas river	Colorado canal	Aug. 26, 1891	April 9, 1889	51,890,850	{ The Colorado Land and Reservoir Co.
{ The Colorado Land and Reservoir Co.'s Lake Pearl }	Arkansas river	Colorado canal	Aug. 26, 1891	April 9, 1889	30,910,176	{ The Colorado Land and Reservoir Co.
the Walters Reservoir	Natural springs		June 10, 1892	Mar. 1, 1892	44,318,000	Louis W. Walters

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 18, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, WINFIELD S. BAYLESS. APPOINTED APRIL 15, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Antonio Sals Ditch	Apishapa creek	Mar. 29, 1891	Dec. 15, 1890	17.65	Margaret A. Moore
The Dotson Ditch	{ Arroya of the { Canon de Agua	Mar. 24, 1892	Mar. 15, 1887	8.25	John M. Dotson
The Enlargement of the Dotson Ditch	{ Arroya of the { Canon de Agua	Mar. 24, 1892	Jan. 5, 1889	42.75	John M. Dotson
The Feeder Ditch to State Res- ervoir	{ Trujillo creek & { Mitote canon	July 30, 1892	May 2, 1892	115.28	The People of the State of Colorado

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 18, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of Stream supplying water therefor.	Name of Ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Lola Reservoir.	Apishapa river.	Feeder ditch	Nov. 16, 1891	Aug. 18, 1891	525,000	J. C. Gunter
The Dotson Reservoir	Canon de Agua	Dotson ditch	Mar. 24, 1892	Jan. 5, 1889	230,000	John M. Dotson
The State Reservoir	{ Trujillo creek and Mitote canon }	Feeder ditch	July 30, 1892	May 2, 1892	20,000,000	{ The People of the State of Colorado.

REPORT OF COMMISSIONER OF DISTRICT NINETEEN.

The ditches named being the needful ones when the water in the Las Animas river begins to get low, have been the first to call for a division of water, (and would say the most troublesome). There is not a measuring flume to any ditch in this district. A great many head-gates are so constructed that it is impossible to regulate the flow of water into the ditches, or to lock them when regulated. I go away from them, and returning in a few hours, and find them tampered with; when the dry season sets in, gates without locks, Water Commissioners without power or authority, and laws without penalties, are about on a par.

I believe that Commissioners should have authority to compel ditch owners to construct head-gates that can be locked, when regulated, or to spike down the gates and cut off the water until so constructed.

I believe that there is more than double the water appropriated to the ditches in this district (19) than there is in the Las Animas river, (except the month of May and part—say one-half—of June).

There are quite a number of ditches west, or up the river above Trinidad, that take their water from Las Animas river, including the North, Middle and South Forks, that are in length "short," and soon return the water back into the river; these have been but little troublesome.

The ditches taking water from the Frijoles, San Francisco and San Ysidro Creeks give some trouble, but it is soon over, because the water stops running early in the season, "plays out."

J. F. RAMEY,
Commissioner.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 19, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, J. F. RAMEY, TRINIDAD, COLORADO. APPOINTED 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Sizer Brothers Ditch	Las Animas river	May 13, 1891	1868	54.50	Sizer Brothers
The Grout Ditch	Muddy creek	June 10, 1891	May 16, 1891	4.90	E. S. Grout
The Hall & Sherman Con. Ditch	San Francisco cr'k	Jan. 7, 1891	Oct. 30, 1891	55.50	Wm. Hall and The Sherman Live Stock Co.
The Dick Robertson Ditch	Rito Seco	April 12, 1892	Mar. 1, 1891	13.65	R. C. Robertson

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 49, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in Cubic feet.	NAMES OF CLAIMANT'S.
The T. C. Cowgers Ditch	S. F. Republican	Dec. 31, 1890	Dec. 10, 1890	40.00	T. C. Cowgers
The Moore & Chaffee Ditch	S. F. Republican	Dec. 31, 1890	Nov. 22, 1890	10.00	Moore & Chaffee
The Fullers Ditch	S. F. Republican	Feb. 16, 1891	Nov. 18, 1890	35.00	Emeline R. Fuller <i>et al.</i>
The Emerson Ditch, No. 1	S. F. Republican	June 5, 1891	Nov. 10, 1891	222.40	Andrew L. Emerson
The Emerson Ditch, No. 2	S. F. Republican	June 5, 1891	Nov. 10, 1891	91.05	Andrew L. Emerson
The Emerson Ditch, No. 3	S. F. Republican	June 5, 1891	Nov. 10, 1891	91.05	Andrew L. Emerson
The McCrillis Ditch, No. 1	Landsman creek	June 18, 1891	Mar. 24, 1891	22.74	M. A. McCrillis
The McCrillis Ditch, No. 2	Landsman creek	June 18, 1891	Mar. 24, 1891	22.74	M. A. McCrillis
The Ragan Ditch	Republican river	July 12, 1891	April 3, 1891	23.51	Burt Ragan <i>et al.</i>
The S. H. Running Ditch, No. 1	S. F. Republican	Aug. 15, 1891	May 28, 1891	16.08	S. H. Running
The S. H. Running Ditch, No. 2	S. F. Republican	Aug. 15, 1891	July 16, 1891	16.08	S. H. Running
The Youngson Ditch	Republican river	Nov. 5, 1891	Sept. 21, 1891	16.41	John P. Youngson
The Newberry Ditch	Spring creek	Mar. 8, 1892	Spring, 1887	9.25	J. C. Newberry
The Rock Island Ditch, No. 1	S. F. Republican	July 1, 1892	May 6, 1892	200.00	Thomas Hayden & Charles E. Dickinson

The Rock Island Ditch, No. 2	S. F. Republican	July 1, 1892	May 30, 1892	200.00	Thomas Hayden & Charles E. Dickinson
The Farr Ditch	{ S. F. Republican through Rum- ming, No. 1 ... }	July 23, 1892	July 24, 1892	17.91	Charles J. Farr

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 49, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Ragan Reservoir.....	Republican river.....	Ragan ditch.....	July 12, 1891	Apr. 3, 1891	108,300	Burt Ragan <i>et al.</i>
The S. H. Rumming Reser- voir No. 1.....	S. fork Republican river spring.....	Built on stream.	Aug. 15, 1891	May 28, 1891	467,187	S. H. Rumming
The S. H. Rumming Reser- voir No. 2.....	S. fork Republican river spring.....	Built in gulch.	Aug. 15, 1891	July 16, 1891	535,000	S. H. Rumming
The Rock Island Reservoir No. 1.....	S. fork Republican river.....	Rock Island ditch No. 1.....	July 1, 1892	May 6, 1892	340,086,720	Charles F. Dickenson
The Rock Island Reservoir No. 2.....	S. fork Republican river & Spring creek.....	Rock Island ditch No. 2.....	July 1, 1892	May 30, 1892	234,436,000	Charles F. Dickenson
The Farr Reservoir.....	S. fork Republican river.....	Rumming ditch No. 1.....	July 7, 1892	Apr. 24, 1892	323,000	Charles J. Farr

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 67, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Fewget Ditch.....	Big Sand creek.....	Dec. 17, 1890	Sept. 17, 1890	8.00	George W. Fewget
The Wm. A. Hill Ditch.....	Springs and ravine.....	Feb. 7, 1891	Dec. 25, 1890	Not given.	Wm. A. Hill
The Grant Newman Canal.....	Clay Band creek.....	April 8, 1891	Mar. 19, 1891	13.20	U. S. Grant Newman
The Water Valley Ditch.....	Big Sandy creek.....	May 8, 1891	Feb. 22, 1891	208.00	{ The Big Sandy and Eureka Creek Land and Water Company.
The Colorado Irrigation Canal.....	Arkansas river.....	July 3, 1891	April 6, 1891	280.80	Powell C. Teed
The Graham Ditch Co.'s Canal.....	Arkansas river.....	Aug. 25, 1891	Oct. 2, 1889	80.00	The Graham Ditch Company
The Serrento Canal.....	Big Sandy creek.....	Sept. 5, 1891	June 22, 1891	13.00	Lundley S. Cox
The J. A. Pierce Ditch.....	Donlon ravine.....	Oct. 1, 1891	Sept. 16, 1891	3.00	J. A. Pierce
The Colorado Irrigation and Land Company's Ditch.....	Arkansas river.....	Oct. 5, 1891	April 6, 1891	280.81	The Colorado Irrigation and Land Company
The Forder Ditch.....	Horse creek.....	Oct. 10, 1891	April 12, 1891	13.00	Adolph Forder
The M. R. McCauley Irrigation Ditch.....	Donlon draw.....	Oct. 27, 1891	April 25, 1891	2.86	M. R. McCauley
The Santa Fe Canal.....	Arkansas river.....	Dec. 17, 1891	Sept. 22, 1891	283.50	The Santa Fe Land and Canal Company
The Mowry Ditch.....	Clay creek.....	Jan. 15, 1892	Jan. 7, 1892	15.00	J. E. Mowry
The Mowry Ditch No. 2.....	Clay creek.....	Jan. 27, 1892	Jan. 7, 1892	30.00	J. E. Mowry

STATEMENT CONCERNING DITCHES.—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in the State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Pleasant Valley Farmers' Mutual Canal & L'd Co.'s Ca. {	Big Sandy creek	Feb. 16, 1892	Jan. 5, 1891	40.00	{ The Pleasant Valley Farmers' Mutual Canal and Land Company.
The Simpson Ditch.....	Limestone creek	Feb. 26, 1892	Dec. 1891	3.00	George Simpson
The Lone Supply Reserv'r Canal	Big Sandy creek	Mar. 19, 1892	Dec. 20, 1891	100.00	John F. Hester
The Powers & Kiowa Ditch and Reservoir Co.'s Canal {	Big Sandy creek	May 11, 1892	Feb. 13, 1892	37.50	{ The Powers & Kiowa Ditch & Reservoir Co.
The Christ Sohlers Ditch.....	Seepage waters	June 25, 1892	May 5, 1892	2.00	Christ Sohlers
The S. N. Canfield Ditch.....	Wild Horse creek	Sep. 6, 1892	Aug. 1, 1892	23.50	S. N. Canfield
The Hines Ditch.....	Springs & seepage	Oct. 10, 1892	Oct. 5, 1892	23.50	Henderson Hines

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 67, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Caddoa Reservoir	Arkansas river	{ Arkansas River }	Feb. 19, 1891	May 11, 1890	30,492,000	Sydney Flinn
The Riverdale Reservoir	Grave Yard creek	{ L. K. & C. Co.'s C }	Aug. 27, 1891	July 15, 1891	10,000,000	Lindley S. Cox
The Lone Supply Reservoir	Big Sandy creek	L. S. Res'r canal.	Mar. 19, 1892	Dec. 20, 1891	6,715,775	John T. Hester
The Prowers & Kiowa Ditch & Reservoir Co.'s Reservoir No. 1.	Big Sandy creek	{ Prowers & Kiowa Ditch & Reservoir Co.'s ditch. }	May 11, 1892	Feb. 13, 1892	3,484,800	{ The Powers & Kiowa Ditch & Reservoir Company. }
The Prowers & Kiowa Ditch & Reservoir Co.'s Reservoir No. 2.			May 11, 1892	Feb. 13, 1892	5,227,200	
The Prowers & Kiowa Ditch & Reservoir Co.'s Reservoir No. 3.			May 11, 1892	Feb. 13, 1892	9,408,960	

CHAPTER IV.

IRRIGATION DIVISION NO. 3.

RIO GRANDE DIVISION.

Superintendent, George Neidhardt, Cotton Creek, Colorado.

I take pleasure in commending the Superintendent of this division, Mr. Neidhardt, for his untiring efforts, during his incumbency, in reducing to some order and system, the fragments of an unsatisfactory administration of that office left on his hands by the former incumbent.

Assuming the duties of the office June 15th, 1891, in the midst of active irrigation, and being unable to get an accounting from his predecessor, for the books and records of the department, he labored under a great disadvantage during the first season in not having the necessary data for an intelligent execution of his work.

His report for 1891, briefly abstracted, shows for District No. 20, an abundant supply of water in the Rio Grande river throughout the season, and no regulation required on the part of the Water Commissioner. Thirteen calls were made for his services in Upper and Lower Rock creek.

In District No. 21, the Alamosa and La Jara creeks meet all demands for water until the latter part of June, when a shortage occurred which lasted until the early part of August, and again occurred during September.

Crops below an average, excepting hay.

In District No. 22, the Conejos failed to meet the requirements in May and June, but owing to copious rains, responded to all demands for the balance of the season.

In District No. 24, watered by the Culebra and Costilla creeks, the supply was fair. Rotation of the water was practised, and general satisfaction expressed with the results.

In District No. 25, supplied from San Luis and Cotton creeks, no complaints of scarcity were made, but the Commissioner intimates that certain parties were so inconsiderate of the rights of others as to divert water from its legitimate channels when his back was turned, and misappropriated the same to their own uses. He calls it "stealing water," and is doubtless correct.

The grain and potato crops were below an average and the hay crop above.

In District No. 26, irrigated from Saguache creek, the Commissioner reported a fair supply of water, crops of all kinds above an average, and favors the rotation of water in times of scarcity.

In District No. 27, supplied from Turtle, Carnero and La Garita creeks, the Commissioner makes no comment on his work.

Following will be found a statistical summary of the Water Commissioner's reports:

Mr. Neidhardt's report for 1892, makes a remarkable showing in the increased acreage irrigated and cultivated, and if his information is reasonably accurate, wonderful progress has been made within the past year in extending the cultivated areas of the San Luis valley.

This showing is especially remarkable when it is considered that the water supply in the Rio Grande and its tributaries were unusually short, as will be seen from the reports of Water Commissioners, as also the table of gaugings of the Rio Grande.

Limited space forbids the publication of the tabulated statistical statement of each Water Commissioner, although they are of interest as giving the name of each ditch, the average amount of water carried by it, and the acreage irrigated, under each classification given in the general summary of the division herewith submitted.

A summation of these detailed statements gives a grand total of 552,644 acres irrigated, and cultivated to grasses and cereals, or other products of the soil. This is largely in excess of the irrigated area as estimated for 1890, which was placed by this Department at 393,953 acres, based partially upon personal interviews, there being little reliable data available for some portions of the valley.

The estimate of the area under ditches does not include the extensive stretch of country under the Rio Grande canal, that being omitted by the Water Commissioner for some reason; and it must be admitted that some of the figures giving the average quantity of water carried in the ditches are far wide of the mark. The reason of this has already been mentioned under the heading of "Water Commissioners."

The San Luis valley is possessed of several features which render it in a measure the ideal irrigation section of Colorado. Its elliptical boundaries embrace something more than a million acres of arable lands, with such uniform and gentle inclination to their surface that the most favorable conditions for rapid and economical irrigation are presented. Laterals from some of its principal canals will follow tangent lines for miles without meeting a depression or undue elevations to break the uniformity of their grades. An understratum of impervious clay lying from three to five feet below the surface over large areas intercepts the percolating waters, and creates an underflow so near the surface as to render sub-irrigation an important feature. The surface flowing of 160 acres will frequently sub-irrigate the 160 lying adjacent and below.

The fertility of its soil is attested by the yields of 50 bushels of wheat and 100 bushels of oats per acre over quite extensive areas.

Surrounded by high ranges, whose lofty summits intercept the moisture-laden clouds and precipitate their contents on the mountain slopes, numberless perennial streams are formed, whose waters when properly conserved will afford an ample supply for all demands for irrigation. An apparently inexhaustible storage of artesian water, brought to the surface at trifling cost, over an extensive area, gives assurance of pure domestic supply and healthful sanitary conditions.

Its system of caual is comprehensive, and the more extensive of them so systematically planned with reference to future requirements as to enable them to perform a maximum service at a minimum of cost.

Large areas, uncultivated and unoccupied, are provided with a complete net work of laterals, and present peculiar advantages for colonization.

Following will be found Mr. Neidhardt's report in full for 1892 :

OFFICE OF GEORGE NEIDHARDT,
SUPERINTENDENT OF WATER DIVISION No. 3. }
COTTON CREEK, SAGUACHE CO., COLO., Dec. 10, '92. }

HON. J. P. MAXWELL,

State Engineer,

Denver, Colorado :

DEAR SIR—I have the honor to submit the following report from Water Division No. 3, State of Colorado :

Water Division No. 3 includes all water districts consisting of lands watered from the Rio Grande river and its tributaries.

This water division embraces water districts numbered 20, 21, 22, 24, 25, 26, 27 and 35.

The reports from the Water Commissioners of the different districts are as follows :

Water District No. 20. John D. McDonald, Water Commissioner, Monte Vista, Colorado.

Mr. McDonald reports there was irrigated in this district, during the year 1892, 135 acres of alfalfa, 6,837 acres of seeded grasses, 71,115 acres of native grasses and 246,009 acres of grain, potatoes, etc.

There was a greater scarcity of water in this district than had been known for a number of years and but for opportune rains, so that the water could be changed from one portion of the district to another, great damage would have occurred to the crops, but beneficial rains came and but little damage was done.

Water District No. 21. Romualdo Ortiz, Water Commissioner, Capulin, Colorado.

Water District No. 21 consists of all land irrigated from ditches or canals taking water from the Alamosa and La Jara creeks and their tributaries.

Mr. Ortiz reports that there are $202\frac{1}{4}$ miles of ditches in District No. 21, and an average of 849 cubic feet of water per second of time, during the irrigating season; that there were 1,575 acres of alfalfa, 965 acres of seeded grasses, 34,106 acres of native grasses and 12,500 acres of other crops irrigated.

He also reports great scarcity of water during the past season, and at the time of his report, November 28, 1892, says: "The water has been so scarce here that even now, people come to ask for water for domestic use and stock, and I have to give it in turns in order to supply them on the upper Alamosa."

Mr. Ortiz was employed during the season 113 days.

Water District No. 22. A. M. Vigil, Water Commissioner, Conejos, Conejos County, Colorado.

Water District No. 22 consists of all lands in the State of Colorado irrigated from ditches or canals taking water from the Conejos creek and its tributaries.

Mr. Vigil says there are ——— miles of ditches in District No. 22, and an average of 3,487.77 cubic feet of water per second of time; that there were 1,215 acres of alfalfa, 3,850 acres of seeded grasses, 37,978 acres of native grasses, and 34,027 acres of other crops irrigated during the past season.

Mr. Vigil in his report says: "I have been employed during the season 103 days in attending to the duties of Water Commissioner, and my assistant, Mr. Jos. Smith, was employed twenty-five days; under the statutes I have been able to receive pay for only eighty days, which is a great hardship towards an officer who attempts to perform his duties faithfully.

"The season has been a very hard one upon all officers connected with the service owing to the scarcity of water in the natural streams in the district, and also to the increased acreage under cultivation. The scarcity of water compelled constant care on the part of the Water Commissioner to enable all users of water to obtain at least a partial supply for their crops, and even after all my efforts in that direction, several farmers were unable to receive sufficient water for their crops.

"I believe the Legislature should come to the relief of the farmer and enact more stringent laws regulating the use of water."

Water District No. 24. A. Chavez, Water Commissioner San Luis, Costilla County, Colorado.

Mr. Chavez's Statistical Report shows 30.75 miles of ditches, 176 cubic feet of water per second of time; twenty-five acres of alfalfa, twenty acres of seeded grasses, 886 acres of native grasses, and 9,607 acres of other crops.

Water District No. 25. J. C. Braley, Water Commissioner, and Tom I. Atwood, Deputy, Cotton Creek, Saguache County, Colorado.

Water District No. 25 consists of all lands irrigated from ditches or canals taking water from the San Luis creek and its tributaries.

Mr. Atwood reports "That there was an average of about 900 cubic feet of water per second, sufficient to irrigate 45,000 acres of land. During the season 170 acres of alfalfa, fourteen acres of seeded grasses, 44,385½ acres of native grasses, and 1,961 acres of other crops were irrigated. We had this year a scarcity of water, but by judicious distribution and economical use of the water, help by the fall rains, there were but few complaints, and the most of them from partners in company ditches."

"I would earnestly recommend that a law would be passed by the next Legislature, giving the Water Commissioner power to shut off the water from ditches until the owners have put in good head-gates, and when necessary, rating flumes; the lack of head-gates has been the cause of most of the trouble in this district for the past three years, and it occurs mostly with the old priorities."

"I was employed eighty days during the season of 1892.

Water District No. 26. R. M. Edwards, Water Commissioner, Saguache, Colorado.

Water District No. 26 consists of all lands irrigated from ditches or canals taking water from the Saguache creek and its tributaries.

Mr. Edwards' report shows 165.14 miles of ditches and an average of 561.36 cubic feet of water per second of time; 460 acres of alfalfa, 79 acres of seeded grasses, 21,656 acres of native grasses and 2,794 acres of other crops irrigated during the season of 1892.

Water District No. 27. Mark Biedell, Water Commissioner, La Garita, Saguache Co., Colorado.

Water District No. 27, consists of all lands irrigated from ditches or canals taking water from Turtle, Carnero, La Garita, and all other creeks and their tributaries, which have their sources of water supply in the La Garita mountains and flow eastward into the San Luis valley.

Mr. Biedell's statistical report shows 30.88 miles of ditches in the district, an average of 52 cubic feet of water per second of time; 210 acres of alfalfa, 2,710 acres of native grasses, and 530 acres of other crops were irrigated during the season.

He made no other report.

Water District No. 35. No Commissioner appointed.

Water District No. 35, consists of all lands in Costilla County, irrigated from ditches or canals taking water from the Trinchera and its tributaries.

No report.

I was called out on the 11th day of April, 1892, and was employed 132 days during the season on the road visiting the different districts, and about 100 days office work, copying decrees, making register, &c., &c. At the time I took the office no work had been done, all books turned over to me were blanks. Last year and the first part of this, we all labored under great disadvantage in not having the decrees until about the middle of May, 1892. I at once notified the Water Commissioners and at their request furnished them with either a complete copy or a tabulated statement. At the present time all the districts are supplied, but some of the counties do not wish to pay for the work.

I would recommend that the next Legislature amend the law concerning the office of Water Superintendent so he will be paid by the State, and also, that he be paid a salary, in that case he could devote his whole time to the work and not be hampered by the County Commissioners; I see it is absolutely necessary that the Superintendent should be constantly on the move or the office will be a perfect failure, as more or less of the Commissioners cannot say *No*.

I would suggest that specific instructions be sent to the Water Superintendents and Water Commissioners

by the State Engineer at the commencement of the season for the collection of data as to crops, artesian wells, etc., etc., to be taken by the Commissioners while in discharge of their official duties, and so put a stop to so much guesswork and obtain a true statement of affairs.

You must excuse delay in receiving my report, but, with the exception of one, did not receive the Commissioners' reports until the latter part of November, and some in December; one is still *non est*.

With many thanks for the kind co-operation on your part and your assistants, and the assistance I received from most of the Water Commissioners in the division,

I remain yours respectfully,

GEO. NEIDHARDT,
Superintendent Water Division No. 3.

IRRIGATION STATISTICS OF DIVISION NO. 3.

CONDENSED FROM THE REPORTS OF THE SEVERAL WATER COMMISSIONERS FOR THE YEAR 1891.

	Miles of ditches.	Average number of cubic feet of water per second of time.	Number of acres that can be irrigated therefrom.	Number of acres of alfalfa irrigated therefrom.	Number of acres of seeded grasses irrigated therefrom.	Number of acres of natural grasses irrigated therefrom.	Number of acres of other crops irrigated therefrom.	Number of acres irrigated by seepage.
District No. 20.	336.50	*23,866.08	416,360	890	1,350	72,150	26,235	---
District No. 21.	164.50	930.00	61,733	868	605	19,761	9,623	1,039
District No. 22.	153.25	600.75	68,814	69	235	19,940	19,989	---
District No. 24.	38.40	175.00	10,538	60	16	1,456	9,006	955
District No. 25.	201.22	827.04	41,352	142	---	39,130½	1,784	---
District No. 26.	147.43	588.12	29,406	474	169	19,253½	2,417	270
District No. 27.	20.00	700.00	3,500	350	---	2,000	900	---
District No. 35.	---	---	---	---	---	---	---	---
Totals.	1,061.40	*37,686.99	631,703	2,853	2,375	173,691	39,954	2,164

*NOTE.—The Average No. of cubic feet per second appears to be wrong in District No. 20 and in the total, but is given here as reported. See report of 1892 in the following table.

IRRIGATION STATISTICS OF DIVISION NO. 3.

CONDENSED FROM THE REPORTS OF THE SEVERAL WATER COMMISSIONERS FOR THE YEAR 1892.

No. of District.	Number of ditches reported.	Total length as reported.	Average amount of water carried during the season in cubic feet per second of time.	Number of acres that can be irrigated.	Number of acres of alfalfa irrigated.	Number of acres of seeded grasses other than alfalfa irrigated.	Number of acres of natural grasses irrigated.	Number of acres of other crops irrigated.	Number of acres of orchard irrigated.	Number of acres irrigated by seepage.	Number of acres irrigated from reservoirs.	Total number of acres irrigated.
20	274	466.57	2,521.54	344,546	135	6,837	71,115	246,009	---	11,820	---	335,916
21	75	202.50	849.00	67,706	1,575	965	34,106	12,500	---	604	---	49,750
22	110	440.25	3,489.77	152,811	1,215	3,850	37,978	34,027	---	4,401	---	81,471
24	23	30.75	176.00	10,538	25	20	886	9,607	---	---	---	10,538
25	180	245.00	900.37	44,998	170	14	44,385	1,961	---	---	---	46,530
26	185	175.00	561.36	28,068	460	79	21,656	2,794	---	---	---	24,989
27	51	30.88	52.00	4,840	210	---	2,710	530	---	---	---	3,450
*35	---	---	---	---	---	---	---	---	---	---	---	---
Totals,	898	1,590.95	8,550.04	635,507	3,790	11,765	212,836	307,428	---	16,825	---	552,644

*Water rights not adjudicated. No Commissioner appointed. No report.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 26, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF THE COURT IN THE TWELFTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE AS FURNISHED BY THE CLERK OF THE COURT.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	Order of priority in district.
Sylva Ditch	Rio Grande river	Mar. 12, 1866	3.00	.....	.....	1
Atencio Ditch	Rio Grande river	April 21, 1866	0.74	.....	3.00	2
San Jose or Lucero Ditch	Rio Grande river	April 30, 1866	0.90	.....	3.74	3
Montoya Ditch	Pinos creek	Mar. 10, 1867	3.00	.....	4.64	4
Montoya Ditch, second appropriation	Pinos creek	Aug. 1, 1867	0.86	3.80	7.64	4½
Montoya Ditch No. 3	Pinos creek	April 30, 1870	0.90	.....	8.44	5
Montoya Ditch No. 4	Pinos creek	April 30, 1870	1.00	.....	9.34	6
Sylva Ditch, second appropriation	Rio Grande river	May 31, 1870	11.00	14.00	10.34	7
Rio Grande Ditch No. 1	Rio Grande river	Aug. 1, 1870	12.86	.....	21.34	8
Mexican Ditch	Pinos creek	June 1, 1871	1.70	.....	34.14	9
James McLeary Ditch	San Francisco creek	May 1, 1872	2.00	.....	35.84	10

McDonald Ditch	Rio Grande river	May 1, 1872	12.80	37.84	11
College Ditch	San Francisco creek	May 30, 1872	1.50	50.64	12
Cochrane Pioneer Ditch	Rio Grande river	June 9, 1872	4.20	52.14	13
Horner Ditch	Rio Grande river	April 25, 1873	2.20	56.34	14
Dyer Ditch	Rio Grande river	April 30, 1873	1.00	58.54	15
San Francisco Overflow Ditch	San Francisco creek	May 1, 1873	1.60	59.54	16
McDonald Ditch, second appropriation	Rio Grande river	May 1, 1873	9.60	61.14	17
Valdez Ditch No. 2	San Francisco creek	May 31, 1873	1.20	70.74	18
Pace Ditch	Rio Grande river	May 31, 1873	1.40	71.94	19
Martinez Ditch	San Francisco creek	May 31, 1873	2.40	73.34	20
Valdez Ditch No. 1	San Francisco creek	May 31, 1873	3.10	75.74	21
Robran Ditch	Pinos creek	May 31, 1873	4.60	78.84	22
Atencio Ditch, second appropriation	Rio Grande river	May 31, 1873	5.20	83.44	23
Jemison No. 6	Pinos creek	June 30, 1873	0.70	88.64	24
Jemison Ditch No. 4	Pinos creek	July 17, 1873	1.00	89.34	25
Beran Ditch No. 6	Pinos creek	July 17, 1873	0.66	90.34	26
Lavatto Ditch	San Francisco creek	Sept. 13, 1873	1.00	91.00	27
Schrader Ditch No. 1	Schrader creek	Sept. 30, 1873	1.60	92.00	28
Jemison and Beran Ditch No. 2	Pinos creek	Dec. 31, 1873	2.20	93.60	29
Loma Ditch	Rio Grande river	Dec. 31, 1873	2.00	95.80	30
Pinos Creek Ditch No. 1	Pinos creek	Dec. 31, 1873	13.40	97.80	31
Hubbard No. 2, Overflow Ditch	Rio Grande river	Mar. 27, 1874	1.00	111.20	32

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Hubbard Ditch	Rio Grande river	Mar. 27, 1874	1.60		112.20	33
Centennial Ditch	Rio Grande river	April 20, 1874	35.80		113.80	34
Mexican Ditch, second appropriation	Pinos creek	April 22, 1874	0.50	2.20	149.60	34½
Schrader Ditch, No. 2	Schrader creek	April 30, 1874	1.60		150.10	35
Fish Ditch	Rio Grande river	April 30, 1874	3.00		151.70	36
Alder Creek Ditch, No. 1	Alder creek	May 1, 1874	2.00		154.70	37
Kane & Callen Ditch	Rio Grande river	May 1, 1874	1.60		156.70	38
Larick Ditch, No. 5	Rock creek	May 1, 1874	2.60		158.30	39
Butler Irrigating Ditch	Rio Grande river	May 1, 1874	4.00		160.90	40
Sylva Ditch, third Appropriation	Rio Grande river	May 12, 1874	2.80	16.80	164.90	41
Rienau Ditch, No. 2	San Francisco creek	May 14, 1874	1.00		167.70	42
Rienau Ditch No. 1	San Francisco creek	May 28, 1874	1.00		168.70	43
Jemison Ditch, No. 9	Pinos creek	May 30, 1874	0.70		169.70	44
Alder Creek Ditch, No. 2	Alder creek	May 30, 1874	2.00		170.40	45
Jemison Ditch, No. 7	Pinos creek	May 31, 1874	0.80		172.40	46

Burns, Larsen & Kiel Ditch	San Francisco creek	May 31, 1874	1.00	-----	173.20	47
Jemison Ditch No. 5	Pinos creek	May 31, 1874	0.54	-----	174.20	48
Jemison Ditch No. 8	Pinos creek	May 31, 1874	0.74	-----	174.74	49
Larick Ditch No. 4	Rock creek	May 31, 1874	2.60	-----	175.48	50
Hornor Ditch, second appropriation	Rio Grande river	May 31, 1874	4.40	6.60	178.08	51
Atencio Ditch, third appropriation	Rio Grande river	May 31, 1874	1.60	7.54	182.48	52
Dupke Ditch No. 2	Rock creek	June 1, 1874	1.30	-----	184.08	53
Dupke Ditch No. 3	Rock creek	June 1, 1874	1.24	-----	185.38	54
Dupke Ditch No. 4	Rock creek	June 2, 1874	2.08	-----	186.62	55
Dupke Ditch No. 6	Rock creek	June 3, 1874	1.00	-----	188.70	56
Dupke Ditch No. 5	Rock creek	June 3, 1874	2.08	-----	189.70	57
Burns Ditch	San Francisco creek	June 14, 1874	2.00	-----	191.78	58
Anderson Ditch	Rio Grande river	June 15, 1874	3.20	-----	193.78	59
Grubb Ditch No. 2	Bear creek	June 21, 1874	1.00	-----	196.98	60
Shaw Ditch No. 2	Spring creek	June 21, 1874	1.20	-----	197.98	61
Grubb Ditch No. 1	Bear creek	June 21, 1874	0.80	-----	199.18	62
Hoecker Ditch No. 1	Rock creek	June 30, 1874	1.82	-----	199.98	63
Elliott Ditch No. 1	Pinos creek	July 17, 1874	1.50	-----	201.80	64
Elliott Ditch No. 4	Pinos creek	July 17, 1874	2.00	-----	203.30	65
Elliott Ditch No. 3	Pinos creek	July 17, 1874	1.00	-----	205.30	66
Elliott Ditch No. 2	Pinos creek	July 17, 1874	1.00	-----	206.30	67
Elliott Ditch No. 5	Pinos creek	July 17, 1874	1.00	-----	207.30	68

STATEMENT CONCERNING DITCHES—Continued.

NANE OF DITCH OR CANAL.	Nature of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet previously appropriated in the district.	Order of priority in district.
Jemison No. 2	Pinos creek	July 18, 1874	0.80	-----	208.30	69
Meadow Overflow Ditch	Rio Grande river	Sep. 30, 1874	3.20	-----	209.10	70
Poole-Jemison Ditch	Pinos creek	Nov. 1, 1874	1.00	-----	212.30	71
Poole-Meadow Ditch	Pinos creek	Nov. 1, 1874	1.00	-----	213.30	72
Lease, Davis & Bingle Ditch	Rio Grande river	Dec. 31, 1874	6.08	-----	214.30	73
Ewing Ditch No. 2	Embargo creek	Jan. 1, 1875	1.40	-----	220.38	74
Raber Ditch	Rio Grande river	Mar. 31, 1875	2.80	-----	221.78	75
San Luis Valley Irrigating Ditch	Rio Grande river	April 1, 1875	8.40	-----	224.58	76
Chadwick Ditch No. 1	Willow creek	April 1, 1875	2.00	-----	232.98	77
Poole-Fairchild Ditch	Pinos creek	April 16, 1875	1.80	-----	234.98	78
Hucker Ditch No. 2	Rock creek	April 18, 1875	2.08	-----	236.78	79
Smith Ditch No. 4	Rock creek	April 29, 1875	0.52	-----	238.86	80
Jemison Ditch No. 1	Pinos creek	April 30, 1875	0.74	-----	239.38	81
Ewing Ditch No. 3	Embargo creek	April 30, 1875	2.00	-----	240.12	82
Off Ditch	Rio Grande river	May 1, 1875	7.00	-----	242.12	83

Rough and Ready Ditch	Rock creek	May	2, 1875	16.67	249.12	84
McIntosh Arroya Ditch	Rio Grande river	May	3, 1875	3.80	265.79	85
McDonald and Gleason Ditch	Rock creek	May	5, 1875	10.29	269.59	86
Larick Ditch No. 7	Rock creek	May	7, 1875	1.00	279.87	87
Yarnel Ditch	Pinos creek	May	7, 1875	6.00	280.87	88
Larick Ditch No. 8	Rock creek	May	9, 1875	0.68	286.87	89
Larick Ditch No. 6	Rock creek	May	11, 1875	0.76	287.55	90
Smith Ditch No. 3	Rock creek	May	15, 1875	1.00	288.31	91
Cadle Ditch No. 1	Rock creek	May	31, 1875	1.50	289.31	92
Hanna Ditch No. 1	Pinos creek	May	31, 1875	0.70	290.81	93
Anderson Ditch, second appropriation	Rio Grande river	May	31, 1875	8.30	291.51	94
Berau Ditch No. 2	Pinos creek	June	1, 1875	0.70	299.81	95
Ewing Ditch No. 1	Embargo creek	June	1, 1875	0.80	300.51	96
Hanna Ditch No. 2	Pinos creek	June	2, 1875	1.00	301.31	97
Little Anna Ditch	Pinos creek	June	6, 1875	1.00	302.31	98
Off Ditch, second appropriation	Rio Grande river	June	7, 1875	1.40	303.31	99
Centennial Ditch, second appropriation	Rio Grande river	June	23, 1875	4.10	304.71	100
Beran Ditch No. 3	Pinos creek	June	30, 1875	1.00	308.81	101
Poole-Brush Ditch	Pinos creek	July	1, 1875	0.90	309.81	102
Poole-Bachle Ditch	Pinos creek	July	1, 1875	0.70	310.71	103
O'Connell Ditch	Pinos creek	July	30, 1875	1.00	311.41	104
Chadwich Ditch No. 4	Willow creek	Sept.	21, 1875	1.40	312.41	105

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in district.	Order of priority in district.
Embargo Ditch.....	Embargo creek	Dec. 31, 1875	3.50	-----	313.81	106
Elliott & Bevan Ditch.....	Pinos creek	Dec. 31, 1875	1.00	-----	317.31	107
Independent Ditch No. 2.....	Rio Grande river	Mar. 16, 1876	25.60	-----	318.31	108
High Water Ditch.....	Rio Grande river	April 1, 1876	2.00	-----	343.91	109
Bishop & Larick Ditch.....	Rock creek	April 17, 1876	2.60	-----	345.91	110
Bevan Ditch No. 5.....	Pinos creek	May 1, 1876	1.20	-----	348.51	111
Fairchild Ditch No. 2.....	Pinos creek	May 31, 1876	.90	-----	349.71	112
Barklay Ditch.....	Pinos creek	May 31, 1876	1.50	-----	550.61	113
Bennett Ditch No. 1.....	Pinos creek	May 31, 1876	1.20	-----	352.11	114
Bennett Creek Ditch.....	Bennett creek	May 31, 1876	1.00	-----	353.31	115
Norris Ditch.....	Pinos creek	May 31, 1876	.90	-----	354.31	116
Bevan Ditch No. 4.....	Pinos creek	May 31, 1876	.80	-----	355.21	117
San Francisco Ditch.....	San Francisco creek	May 31, 1876	1.00	-----	356.01	118
Bennett Ditch No. 2.....	Pinos creek	May 31, 1876	1.00	-----	357.01	119
Tryon Ditch.....	Rock creek	May 31, 1876	6.25	-----	358.01	120

Fairchild Ditch No. 1	Pinos creek	May 30, 1876	1.00	364.26	121
Little Danube Ditch	Pinos creek	May 30, 1876	2.50	365.26	122
Kiel & Larsen Ditch	San Francisco creek	June 1, 1876	1.00	367.76	123
Phillips Ditch No. 1	Elk creek	June 16, 1876	1.20	368.76	124
Chadwick Ditch No. 2	Willow creek	June 21, 1876	1.00	369.96	125
Chadwick Ditch No. 3	Willow creek	June 21, 1876	2.00	370.96	126
Todd Ditch	Cherry creek	June 30, 1876	.90	372.96	127
Phillips Ditch No. 2	Elk creek	June 30, 1876	1.00	373.86	128
Town Ditch of Del Norte	Rio Grande river	July 1, 1876	9.20	374.86	129
Centennial Ditch, third appropriation	Rio Grande river	July 5, 1876	3.60	384.06	130
Rough and Ready Ditch, second appropriation	Rock creek	July 20, 1876	8.33	387.66	131
Ward Ditch No. 1	San Francisco creek	Oct. 18, 1876	1.60	395.99	132
Ward Ditch No. 3	San Francisco creek	Oct. 31, 1876	1.00	397.59	133
Cochran Bros. Ditch No. 1	San Francisco creek	Oct. 31, 1876	2.30	398.59	134
Cochran Bros. Ditch No. 2	San Francisco creek	Oct. 31, 1876	3.00	400.89	135
Ward Ditch No. 2	San Francisco creek	Oct. 31, 1876	1.00	403.89	136
Bachle Ditch	Pinos creek	Nov. 30, 1876	.86	404.89	137
Wolf Creek Ditch No. 2	Wolf creek	Dec. 31, 1876	4.00	405.75	138
Wolf Creek Ditch No. 1	Wolf creek	Dec. 31, 1876	4.00	409.75	139
Smith Ditch No. 2	Rock creek	Dec. 31, 1876	1.82	413.75	140
Living Creek Ditch No. 4	Embargo creek	April 1, 1877	2.00	415.57	141
James Peterson Ditch	Rio Grande river	April 30, 1877	3.60	417.57	142

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Smith Ditch, No. 1.....	Rock creek.....	April 30, 1877	1.00	.....	421.17	143
Jemison & Bevan Ditch, No. 1.....	Pinos creek.....	May 1, 1876	1.00	.....	422.17	144
Horner Ditch, third appropriation.....	Rio Grande river.....	May 15, 1876	5.00	11.60	423.17	145
Horner Ditch, fourth appropriation.....	Rio Grande river.....	May 15, 1876	3.20	14.80	428.17	146
Jemison Ditch, No. 3.....	Pinos creek.....	May 30, 1876	.90	.....	431.37	147
Atencio Ditch, No. 2.....	Rio Grande river.....	May 31, 1876	4.00	.....	432.27	148
Atencio Ditch, fourth appropriation.....	Rio Grande river.....	May 31, 1876	3.80	11.34	436.27	149
Anderson Ditch, third appropriation.....	Rio Grande river.....	May 31, 1876	9.60	21.10	440.07	150
Centennial Ditch, fourth appropriation.....	Rio Grande river.....	June 23, 1876	4.00	47.50	449.67	151
Mill Ditch.....	Rock creek.....	Sept. 21, 1876	2.60	.....	453.67	152
Rio Grande and Piedra Valley Ditch.....	Rio Grande river.....	Nov. 30, 1876	4.00	.....	456.27	153
Rio Grande and Piedra Valley Ditch, second appropriation.....	Rio Grande river.....	Nov. 30, 1876	12.60	16.60	460.27	154
MacLeod Ditch, No. 5.....	San Francisco creek.....	April 1, 1878	1.00	.....	472.87	155
Shaw Ditch, No. 1.....	Spring creek.....	April 30, 1878	4.00	.....	473.87	156
Shaw Ditch, No. 3.....	Spring creek.....	April 30, 1878	1.20	.....	477.87	157

McLeod Ditch No. 1.....	San Francisco creek.....	May 1, 1876.....	1.00.....	479.07.....	158.....
Rough and Ready Ditch, third appropriation.....	Rock creek.....	May 1, 1876.....	8.33.....	480.07.....	159.....
Larick Ditch No. 9.....	Rock creek.....	May 2, 1876.....	.89.....	488.40.....	160.....
Heilman & Larick Ditch.....	Rock creek.....	May 15, 1876.....	1.00.....	489.29.....	161.....
Compos Ditch.....	Willow creek.....	May 30, 1876.....	.80.....	490.29.....	162.....
Larick Ditch No. 2.....	Rock creek.....	May 31, 1876.....	1.00.....	491.09.....	163.....
Mallet Ditch.....	Pinos creek.....	May 31, 1876.....	2.00.....	492.09.....	164.....
Davies Ditch No. 1.....	Embargo creek.....	June 1, 1878.....	2.60.....	494.09.....	165.....
Field Ditch.....	Rock creek.....	June 30, 1878.....	1.00.....	496.69.....	166.....
Garden Ditch.....	Rock creek.....	June 30, 1878.....	1.30.....	497.69.....	167.....
Larick Ditch No. 1.....	Rock creek.....	July 1, 1878.....	1.04.....	498.99.....	168.....
Larick Ditch No. 3.....	Rock creek.....	July 10, 1878.....	.70.....	500.03.....	169.....
Bevan Ditch No. 1.....	Pinos creek.....	July 17, 1878.....	3.20.....	500.73.....	170.....
Excelsior Ditch.....	Rio Grande river.....	Sept. 30, 1878.....	45.70.....	503.93.....	171.....
Pfeiffer Ditch.....	Rio Grande river.....	Dec. 1, 1878.....	3.20.....	549.63.....	172.....
West Side Ditch.....	Rio Grande river.....	Dec. 31, 1878.....	2.40.....	552.83.....	173.....
Independent Ditch.....	Rio Grande river.....	Mar. 24, 1879.....	12.00.....	555.23.....	174.....
Ward Ditch No. 4.....	San Francisco creek.....	Apr. 14, 1879.....	1.00.....	567.23.....	175.....
Wassen Ditch.....	Willow creek.....	May 31, 1879.....	7.00.....	568.23.....	176.....
Montoya Ditch, third appropriation.....	Pinos creek.....	May 31, 1879.....	2.40.....	575.23.....	177.....
William Peachy Ditch.....	Rock creek.....	May 31, 1879.....	4.17.....	577.63.....	178.....
Charlesworth Ditch No. 1.....	Embargo creek.....	June 1, 1879.....	1.00.....	581.80.....	179.....

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet previously appropriated in the district.	Order of priority in district.
Breen Ditch.....	Embargo creek.....	June 21, 1879	.90	-----	582.80	180
Centennial Ditch, fifth appropriation.....	Rio Grande river.....	June 23, 1879	19.37	66.87	583.70	181
Rio Grande Ditch.....	Rio Grande river.....	July 15, 1879	23.20	-----	603.07	182
Star Ditch.....	Rio Grande river.....	Aug. 20, 1879	12.57	-----	626.27	183
Ehrowitz Ditch.....	Rio Grande river.....	Aug. 31, 1879	1.60	-----	638.84	184
Hermanthal Ditch.....	Rio Grande river.....	Aug. 31, 1879	2.80	-----	640.44	185
Park & Green Ditch.....	Rio Grande river.....	Oct. 31, 1879	3.40	-----	643.24	186
Kiel & Larsen Spring Ditch.....	Spring creek.....	Nov. 1, 1879	1.00	-----	646.64	187
D. H. Dunn private right in Scotch Ditch and Rio Grande Canal.....	Rio Grande river.....	Nov. 30, 1879	11.20	-----	647.64	188
Schuch & Schmidt Ditch.....	Rio Grande river.....	Dec. 30, 1879	2.50	-----	658.84	189
Rock Creek, Anderson & Cadle Anderson Ditch Consolidated.....	Rock creek.....	Mar. 21, 1880	1.00	-----	661.34	190
Cadle Ditch No. 3.....	Rock creek.....	April 30, 1880	1.82	-----	662.34	191
Bachman Ditch No. 1.....	Embargo creek.....	April 30, 1880	1.00	-----	664.16	192

Cole Ditch No. 2 and Extension	Rock creek	April 30, 1880	5.20	-----	665.16	193
Henderson Overflow	Rio Grande river	May 1, 1880	2.20	-----	670.36	194
Alder Creek Ditch No. 3	Alder creek	May 1, 1880	4.00	-----	672.56	195
Charlesworth Ditch No. 2	Embargo creek	May 1, 1880	1.00	-----	676.56	196
Deckman Ditch No. 1	Spring creek	May 6, 1880	.90	-----	677.56	197
Bauer Ditch	Rio Grande river	May 16, 1880	8.40	-----	678.46	198
Schacherl Ditch	Rio Grande river	May 20, 1880	1.20	-----	686.86	199
Cole Ditch No. 1 and Extension	Rock creek	May 31, 1880	.90	-----	688.06	200
Minor Ditch	Rio Grande river	June 1, 1880	1.60	-----	688.96	201
Embargo Ditch, second appropriation	Embargo creek	June 2, 1880	1.60	5.10	690.56	202
Nichol Ditch	Rio Grande river	June 15, 1880	8.00	-----	692.16	203
Centennial Ditch, sixth appropriation	Rio Grande river	June 23, 1880	10.40	77.27	700.16	204
Rio Grande & Piedra Valley Ditch, third appropriation	Rio Grande river	June 30, 1880	25.80	42.40	710.56	205
Horne Ditch, fifth appropriation	Rio Grande river	Sep. 5, 1880	7.73	22.53	736.36	206
John Anderson Ditch	Rio Grande river	Sep. 15, 1880	1.40	-----	744.09	207
Ward Ditch No. 4, second appropriation	San Francisco creek	Dec. 31, 1880	1.10	2.10	745.49	208
Rio Grande Ditch, second appropriation	Rio Grande river	Dec. 31, 1880	3.20	26.40	746.59	209
Kane & Callen Ditch, second appropriation	Rio Grande river	Dec. 31, 1880	4.00	5.60	749.79	210
Biedell Ditch	Rio Grande river	Dec. 31, 1880	20.00	-----	753.79	211
Mike White's private right in Enterprise Ditch and Rio Grande Canal	Rio Grande river	Jan. 31, 1881	13.20	-----	773.79	212
Park & Green Ditch, second appropriation	Rio Grande river	Mar. 1, 1881	3.20	6.60	786.99	213

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Rio Grande Ditch No. 2	Rio Grande river	Mar. 31, 1881	3.20	.....	790.19	214
Bachman Ditch No. 2	Embargo creek	Mar. 31, 1881	3.20	.....	793.39	215
Schacherl Ditch, second appropriation	Rio Grande river	April 1, 1881	2.00	3.20	796.59	216
Loma Ditch, second appropriation	Rio Grande river	April 2, 1881	6.00	8.00	798.59	217
Rio Grande and San Luis Ditch	Rio Grande river	April 2, 1881	21.60	.....	804.59	218
Mentoya Ditch, fourth appropriation	Pinos creek	April 8, 1881	.80	7.00	826.19	219
Davies Ditch No. 2	Embargo creek	April 10, 1881	2.00	.....	826.99	220
Cadle Ditch No. 1	Rock creek	April 15, 1881	1.50	.....	828.99	221
Ladd Ditch	Embargo creek	April 30, 1881	.90	.....	830.49	222
Beiger Ditch	Embargo creek	April 30, 1881	1.00	.....	831.39	223
Fish Ditch, second appropriation	Rio Grande river	April 30, 1881	15.60	18.60	832.39	224
Bachman & Seitz Ditch	Embargo creek	April 30, 1881	1.00	.....	847.99	225
Deckman Ditch	Spring creek	May 8, 1881	.90	.....	848.99	226
Montoya Ditch No. 6	Pinos creek	May 8, 1881	1.00	.....	849.89	227
Seitz Ditch	Embargo creek	May 10, 1881	1.00	.....	850.89	228

Excelsior Ditch, second appropriation	Rio Grande river	May 30, 1881	13.70	59.40	851.89	229
McIntosh Arroya Ditch, second appropriation	Rio Grande river	May 30, 1881	1.20	5.00	865.59	230
D. H. Dunn's private right in Enterprise Ditch and Rio Grande Canal, second appropriation	Rio Grande river	May 31, 1881	6.40	17.60	866.79	231
Leese, Davis & Bingle Ditch, second appropriation	Rio Grande river	May 31, 1881	4.26	10.34	873.19	232
John Anderson Ditch, second appropriation	Rio Grande river	May 31, 1881	1.80	3.20	877.45	233
Church Ditch	Rio Grande river	May 31, 1881	1.00		879.25	234
Centennial Ditch, seventh appropriation	Rio Grande river	June 23, 1881	2.60	79.87	880.25	235
Rio Grande and Piedra Valley, fourth appropriation	Rio Grande river	June 30, 1881	4.00	46.40	882.85	236
Rio Grande Canal	Rio Grande river	Sept. 2, 1881	318.40		886.85	237
Rio Grande Canal, second appropriation	Rio Grande river	Sept. 2, 1881	197.00	515.40	1,205.25	238
John Nelson Ditch	Rio Grande river	Oct. 3, 1881	8.00		1,402.25	239
Rio Grande and Larlet	Rio Grande river	Oct. 13, 1881	29.30		1,410.25	240
Butler Irrigating Ditch, second appropriation	Rio Grande river	April 5, 1882	4.80	8.80	1,439.55	241
Marajo Ditch	Rio Grande river	April 15, 1882	4.80		1,444.35	242
Schuch & Schmidt Ditch, second appropriation	Rio Grande river	April 15, 1882	2.20	4.70	1,449.15	243
Poole-Mesa Ditch	Pinos creek	May 1, 1882	1.00		1,451.35	244
Atencio Ditch, fifth appropriation	Rio Grande river	May 31, 1882	3.20	14.54	1,452.35	245
McLeod Ditch No. 2	San Francisco creek	May 31, 1882	1.00		1,455.55	246
Monte Vista Canal	Rio Grande river	May 31, 1882	92.70		1,456.55	247
Kernan Ditch	Pinos creek	May 31, 1882	0.70		1,549.25	248
McLeod Ditch No. 4	San Francisco creek	May 31, 1882	0.70		1,549.95	249

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each property.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Sprague Ditch.....	Pinos creek.....	May 31, 1882	.80	.....	1,550.65	250
McLeod Ditch No. 3.....	San Francisco creek.....	May 31, 1882	1.00	.....	1,551.45	251
McLeod Ditch No. 6.....	San Francisco creek.....	May 31, 1882	1.00	.....	1,552.45	252
Cole Ditch No. 6.....	Rock creek.....	May 31, 1882	.70	.....	1,553.45	253
Rio Grande and Lariat Ditch, second appropriation.....	Rio Grande river.....	June 1, 1882	1.86	31.16	1,554.15	254
Hillsdale Ditch.....	Rio Grande river.....	June 15, 1882	1.60	.....	1,556.01	255
Cemetery Ditch.....	San Francisco creek.....	June 23, 1882	.30	.....	1,557.61	256
Centennial Ditch, eighth appropriation.....	Rio Grande river.....	June 23, 1882	1.50	81.37	1,557.91	257
West Side Ditch, second appropriation.....	Rio Grande river.....	June 30, 1882	10.00	12.40	1,559.41	258
Dunning Mill Ditch.....	Rio Grande river.....	July 1, 1882	.60	.....	1,569.41	259
San Francisco Ditch, second appropriation.....	San Francisco creek.....	July 2, 1882	6.00	7.00	1,570.01	260
Empire Canal.....	Rio Grande river.....	Aug. 10, 1882	312.30	.....	1,576.01	261
Empire Canal, second appropriation.....	Rio Grande river.....	Aug. 10, 1882	62.50	374.80	1,888.31	262
Alamosa Town Ditch.....	Rio Grande river.....	Sep. 30, 1882.	12.80	.....	1,950.81	263
Sheridan South Ditch.....	Spring creek.....	Sep. 30, 1882	1.00	.....	1,963.61	264

Corson Ditch	Rio Grande river	Dec. 31, 1882	1.00	-----	1,964.61	265
Sylra Ditch, fourth appropriation	Rio Grande river	Mar. 1, 1883	1.40	18.20	1,965.61	266
Voss Ditch	Rio Grande river	Mar. 30, 1883	1.00	-----	1,967.01	267
Sheridan North Ditch	Spring creek	Mar. 31, 1883	2.00	-----	1,968.01	268
Finch's Ditch	Pinos creek	Mar. 31, 1883	2.20	-----	1,970.01	269
Extension of Smith Ditch	Rock creek	April 18, 1883	4.17	-----	1,972.21	270
Cole Ditch No. 5	Rock creek	May 31, 1883	.65	-----	1,976.38	271
San Luis Valley Irrigation Ditch, second appropriation	Rio Grande river	May 31, 1883	6.20	14.60	1,977.03	272
San Luis Valley Irrigation Ditch, third appropriation	Rio Grande river	May 31, 1883	9.40	24.00	1,983.23	273
San Jose or Lucero Ditch, second appropriation	Rio Grande river	May 31, 1883	8.60	9.50	1,992.63	274
Little Anna Ditch, second appropriation	Rio Grande river	May 31, 1883	.60	1.60	2,001.23	275
Sylra Ditch, fifth appropriation	Rio Grande river	June 10, 1883	.80	19.00	2,001.83	276
Bachman & Seitz Ditch, second appropriation	Embargo creek	June 21, 1883	1.00	2.00	2,002.63	277
Centennial Ditch, ninth appropriation	Rio Grande river	June 23, 1883	1.60	82.97	2,003.63	278
Cole Ditch No. 4	Rock creek	July 31, 1883	.60	-----	2,005.23	279
Rio Grande and Piedra Valley Ditch, fifth appropriation	Rio Grande river	Sept. 21, 1883	2.50	48.90	2,005.83	280
Knoblauch Ditch	Rio Grande river	Oct. 5, 1883	1.20	-----	2,008.33	281
San Luis Valley Canal	Rio Grande river	Dec. 12, 1883	50.30	-----	2,009.53	282
Meadow (overflow Ditch, second appropriation	Rio Grande river	Dec. 31, 1883	.80	4.00	2,059.83	283
Hickory Jackson Ditch	Rio Grande river	Dec. 31, 1883	19.00	-----	2,060.63	284
Spring Creek Ditch No. 1	Spring creek	Mar. 20, 1884	6.40	-----	2,079.63	285
Dupke Ditch No. 1	Rock creek	May 1, 1884	1.04	-----	2,086.03	286

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Kiel, Larsen & Gardner Ditch.....	San Francisco creek.....	May 2, 1884	1.00	.....	2,087.07	287
Excelsior Ditch, third appropriation.....	Rio Grande river.....	May 30, 1884	11.60	71.00	2,088.07	288
Barricklow Ditch.....	Pinos creek.....	May 31, 1884	1.00	.....	2,099.67	289
Rio Grande and Lariat Ditch, third appropriation.....	Rio Grande river.....	June 1, 1884	7.20	38.36	2,100.67	290
Shotwell Ditch.....	Rock creek.....	June 15, 1884	2.08	.....	2,107.87	291
Kiel, Larsen & Gardner Ditch, second appropriation.....	San Francisco creek.....	June 16, 1884	.30	1.30	2,109.95	292
Ryan Ditch.....	Cat creek.....	June 20, 1884	1.60	.....	2,110.25	293
Arroya Ditch, from Rock Creek.....	Rock creek.....	Aug. 1, 1884	7.80	.....	2,111.85	294
Clover Leaf Ditch.....	Rock creek.....	Aug. 4, 1884	2.08	.....	2,119.65	295
Rio Grande and Piedra Valley Ditch, sixth appropriation.....	Rio Grande river.....	Sept. 21, 1884	2.40	51.30	2,121.73	296
Meadow Glen Ditch.....	Rio Grande river.....	Dec. 25, 1884	3.00	.....	2,124.13	297
Meadow Glen Ditch, second appropriation.....	Rio Grande river.....	Dec. 25, 1884	22.00	25.00	2,127.13	298
Billings Ditch.....	Rio Grande river.....	Feb. 23, 1885	36.54	.....	2,149.13	299
Hall Ditch.....	Rio Grande river.....	Mar. 1, 1885	1.00	.....	2,185.67	300
Larick Ditch No. 2, second appropriation.....	Rock creek.....	May 31, 1885	4.17	5.17	2,186.67	301

Rio Grande & Lariet Ditch, fourth appropriation	Rio Grande river	June 4, 1885	11.20	49.56	2,190.84	302
Rio Grande Canal, third appropriation	Rio Grande river	June 10, 1885	22.80	538.20	2,202.04	303
Clegthorn Ditch	Rio Grande river	June 15, 1885	1.00	---	2,224.84	304
Rio Grande & Pedra Valley Ditch, seventh appropriation	Rio Grande river	Sept. 21, 1885	6.70	58.00	2,225.84	305
Costilla Ditch	Rio Grande river	March 1, 1886	172.80	---	2,232.54	306
Brook Farm Ditch	Rock creek	April 30, 1886	2.60	---	2,405.34	307
Mexican Ditch, third appropriation	Pinos creek	April 30, 1886	1.50	3.70	2,407.94	308
Brook Farm Ditch, second appropriation	Rock creek	April 30, 1886	3.12	5.72	2,409.44	309
Rio Grande Ditch No. 4	Rio Grande river	May 10, 1886	12.00	---	2,412.56	310
Cemetery Ditch, second appropriation	San Francisco creek	May 15, 1886	1.20	1.50	2,424.56	311
Rio Grande & Lariet Ditch, fifth appropriation	Rio Grande river	May 24, 1886	4.30	53.86	2,435.76	312
Excelsior Ditch, fourth appropriation	Rio Grande river	May 30, 1886	4.50	75.50	2,430.06	313
Cole Ditch No. 1, second appropriation	Rock creek	May 31, 1886	1.56	2.46	2,434.56	314
Grubb Ditch No. 3	Bear creek	June 1, 1886	1.00	---	2,436.12	315
Embargo Ditch, third appropriation	Embargo creek	June 3, 1886	1.60	6.70	2,437.12	316
Rock Creek, Anderson and Cadle-Anderson Ditch, Consolidated, second appropriation	Rock creek	June 6, 1886	4.17	5.17	2,438.72	317
Rio Grande Canal, fourth appropriation	Rio Grande river	June 10, 1886	22.70	560.90	2,442.89	318
Monte Vista Canal, second appropriation	Rio Grande river	June 10, 1886	7.24	99.94	2,465.59	319
Meadow Ditch	Spring creek	June 24, 1886	3.06	---	2,472.83	320
Cooley & Stammert Ditch	Spring creek	June 30, 1886	3.20	---	2,475.89	321
South Fork High Line Ditch	Rio Grande river	June 30, 1886	17.60	---	2,479.09	322

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	Order of priority in District.
Hoselkuss Ditch.....	Rio Grande river.....	June 30, 1886	2.40	.....	2,496.69	323
Kane & Callen Ditch, third appropriation.....	Rio Grande river.....	June 30, 1886	2.60	8.20	2,499.09	324
Deitrich & La Cass Ditch.....	Rio Grande river.....	Aug. 31, 1886	10.40	.....	2,501.69	325
Deitrich & La Cass Ditch, second appropriation.....	Rio Grande river.....	Aug. 31, 1886	2.40	12.80	2,512.09	326
Cochran Bros. Ditch No. 3.....	San Francisco creek.....	Sept. 2, 1886	2.00	.....	2,514.49	327
Rio Grande and Piedra Valley Ditch, eighth appropriation.....	Rio Grande river.....	Sept. 21, 1886	2.80	60.80	2,516.49	328
O'Connell Ditch, second appropriation.....	Pinos creek.....	Oct. 1, 1886	.70	1.70	2,519.29	329
Prairie Ditch.....	Rio Grande river.....	Nov. 1, 1886	192.00	.....	2,519.99	330
Rough and Ready Ditch, fourth appropriation.....	Rock creek.....	Dec. 31, 1886	1.04	34.37	2,711.99	331
Myers Ditch.....	Embargo creek.....	Jan. 1, 1887	1.30	.....	2,713.03	332
Star Enlargement Company's Ditch.....	Rio Grande river.....	Mar. 21, 1887	10.00	.....	2,714.33	333
Star Enlargement Company's Ditch, second appropriation.....	Rio Grande river.....	Mar. 21, 1887	78.10	88.10	2,724.33	334
Sheridan South Ditch, second appropriation.....	Spring creek.....	Mar. 31, 1887	2.00	3.00	2,802.43	335
Pfeiffer Ditch, second appropriation.....	Rio Grande river.....	Apr. 1, 1887	3.20	6.40	2,804.43	536
Ryan Ditch No. 2.....	Cat creek.....	Apr. 30, 1887	1.60	.....	2,807.63	337

Empire Canal, fourth appropriation	Rio Grande river	May 16, 1887	6.00	380.80	2,809.23	338
Meadow Ditch, second appropriation	Spring creek	May 16, 1887	1.20	4.26	2,815.23	339
Excelsior Ditch, fourth appropriation	Rio Grande river	May 30, 1887	.66	76.16	2,816.43	340
Cooley & Staunert Ditch, second appropriation	Spring creek	May 31, 1887	14.80	18.00	2,817.09	341
Howlett Ditch	Pinos creek	May 31, 1887	1.20		2,831.89	342
Rio Grande and Lariat Ditch, sixth appropriation	Rio Grande river	June 1, 1887	2.60	56.46	2,833.09	343
Rio Grande Canal, fifth appropriation	Rio Grande river	June 10, 1887	26.00	586.90	2,835.69	344
Monte Vista Canal, third appropriation	Rio Grande river	June 10, 1887	30.80	130.74	2,861.69	345
Rio Grande and Piedra Valley Ditch, ninth appropriation	Rio Grande river	Sep. 21, 1887	3.25	64.05	2,892.49	346
Farmers' Union Ditch	Rio Grande river	Nov. 9, 1887	183.90		2,895.74	347
Farmers' Union Ditch, second appropriation	Rio Grande river	Nov. 9, 1887	83.30	267.20	3,079.64	348
Spring Creek Ditch No. 1, second appropriation	Spring creek	Nov. 30, 1887	6.40	12.80	3,162.94	349
Monte Vista Canal, fourth appropriation	Rio Grande river	Nov. 30, 1887	219.60	350.34	3,169.34	350
Spruce Lawn Ditch	Spring creek	Feb. 10, 1888	1.00		3,388.94	351
Spruce Lawn Ditch, second appropriation	Spring creek	Feb. 10, 1888	15.30	16.30	3,389.94	352
Schuch & Schmidt Ditch, third appropriation	Rio Grande river	Mar. 1, 1888	3.20	7.90	3,495.24	353
San Luis Valley Canal, second appropriation	Rio Grande river	Mar. 9, 1888	45.20	95.50	3,498.44	354
San Luis Valley Canal, third appropriation	Rio Grande river	Mar. 13, 1888	19.90	115.40	3,453.64	355
Excelsior Ditch, sixth appropriation	Rio Grande river	Mar. 31, 1888	9.10	85.26	3,473.54	356
Spring Ranch Ditch	Rio Grande river	April 1, 1888	4.80		3,482.64	357
Spring Ranch Ditch, second appropriation	Rio Grande river	April 1, 1888	4.80	9.60	3,487.44	357 ¹
Empire Canal, sixth appropriation	Rio Grande river	April 2, 1888	15.60	398.70	3,492.24	358

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	Order of priority in district.
Murray Ditch	Dry creek	April 17, 1888	6.40	---	3,507.84	359
Eagle Ditch	Rock creek	April 23, 1888	6.25	---	3,514.24	360
San Luis Valley Canal, fourth appropriation	Rio Grande river	April 24, 1888	20.80	136.20	3,520.49	361
Larick Ditch No. 2, third appropriation	Rock creek	May 1, 1888	4.16	9.33	3,541.29	362
Swartz Ditch	Rock creek	May 1, 1888	3.64	---	3,545.45	363
Perkins' Ditch	Pinos creek	May 1, 1888	5.60	---	3,549.09	364
Empire Canal, fifth appropriation	Rio Grande river	May 16, 1888	2.30	383.10	3,554.69	365
Bennett Ditch No. 3	Cherry creek	May 30, 1888	.80	---	3,556.99	366
Little Daube Ditch, second appropriation	Pinos creek	May 31, 1888	.80	3.30	3,557.79	367
Cole Ditch No. 3	Rock creek	May 31, 1888	.76	---	3,558.59	368
Rio Grande and Lariet Ditch, seventh appropriation	Rio Grande river	June 1, 1888	3.50	59.96	3,559.35	369
Newton Ditch	Rock creek	June 1, 1888	10.00	---	3,562.85	370
Rio Grande Canal, sixth appropriation	Rio Grande river	June 10, 1888	33.60	620.50	3,572.85	371
Monte Vista, fifth appropriation	Rio Grande river	June 10, 1888	28.00	378.34	3,606.45	372
Spring Branch Ditch	Spring Branch creek	June 14, 1888	.90	---	3,634.45	373

Beiger Ditch, second appropriation	Embargo creek	June 30, 1888	0.80	1.80	3,635.35	374
Kenilworth Canal	Rio Grande river	July 3, 1888	4.10		3,636.15	375
Kenilworth Canal, second appropriation	Rio Grande river	July 3, 1888	192.95	197.05	3,640.25	575½
Brey Ditch	Rio Grande river	Aug. 1, 1888	1.00		3,833.20	376
San Luis Valley Canal, fifth appropriation	Rio Grande river	Sept. 1, 1888	104.10	240.30	3,834.20	377
Minor Ditch, second appropriation	Rio Grande river	Sept. 21, 1888	14.00	15.60	3,938.30	378
Rio Grande and Piedra Valley Ditch, tenth appropriation	Rio Grande river	Sept. 21, 1888	6.70	70.75	3,952.30	379
Bellows Creek Ditch, No. 1	Bellows' creek	Dec. 1, 1888	3.00		3,959.00	380
Bellows Creek Ditch, No. 2	Bellows' creek	Dec. 10, 1888	3.20		3,962.00	381
Bellows Creek Ditch, No. 3	Bellows' creek	Dec. 10, 1888	1.60		3,965.20	382
Bellows Creek Ditch, No. 4	Bellows' creek	Dec. 10, 1888	1.50		3,966.80	383
Farmers' Union Ditch, third appropriation	Rio Grande river	Dec. 31, 1888	277.30	544.50	3,968.30	383½
San Luis Valley Canal, sixth appropriation	Rio Grande river	Feb. 7, 1889	13.00	253.30	4,245.60	384
San Luis Valley Canal, seventh appropriation	Rio Grande river	Feb. 15, 1889	45.60	298.90	4,258.60	385
Rio Grande Canal, seventh appropriation	Rio Grande river	Mar. 30, 1889	24.40	644.90	4,304.20	386
Cole Ditch, No. 1, third appropriation	Rock creek	May 1, 1889	3.90	6.36	4,328.60	387
Excelsior Ditch, seventh appropriation	Rio Grande river	May 30, 1889	2.00	87.26	4,332.50	388
Rio Grande Canal, eighth appropriation	Rio Grande river	June 10, 1889	16.60	661.50	4,334.50	389
Monte Vista Canal, sixth appropriation	Rio Grande river	June 10, 1889	14.20	392.54	4,351.10	390
Independent Ditch, No. 2, second appropriation	Rio Grande river	June 21, 1889	4.80	30.40	4,365.30	391
Church Ditch, second appropriation	Rio Grande river	July 31, 1889	0.02	1.02	4,370.10	392
Mesa Ditch	Rio Grande river	Sept. 5, 1889	2.00		4,370.12	393

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second allotted to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
Rio Grande and Piedra Valley Ditch, eleventh appropriation.....	Rio Grande river.....	Sept. 21, 1889	5.70	76.45	4,372.12	394
Costilla Ditch, second appropriation.....	Rio Grande river.....	Sept. 25, 1889	54.70	227.50	4,377.82	395
Beaver Creek Ditch.....	Beaver creek.....	Oct. 16, 1889	1.00	.....	4,432.52	396
Empire Canal, seventh appropriation.....	Rio Grande river.....	Oct. 30, 1889	92.00	497.38	4,433.52	397
Empire Canal, eighth appropriation.....	Rio Grande river.....	Oct. 30, 1889	118.50	615.88	4,525.52	398
Corson Ditch, second appropriation.....	Rio Grande river.....	Dec. 31, 1889	2.80	3.80	4,644.02	399
Empire Canal, ninth appropriation.....	Rio Grande river.....	Jan. 31, 1890	219.30	835.18	4,646.82	400
Prairie Ditch, second appropriation.....	Rio Grande river.....	Feb. 12, 1890	43.00	235.00	4,866.12	401
Rio Grande and Lariat Ditch, eighth appropriation.....	Rio Grande river.....	Feb. 13, 1890	31.70	91.66	4,909.12	402
Hickory Jackson Ditch, second appropriation.....	Rio Grande river.....	Mar. 31, 1890	6.00	25.00	4,940.82	403
Hickory Jackson Ditch, third appropriation.....	Rio Grande river.....	Mar. 31, 1890	11.00	36.00	4,946.82	404
Excelsior Ditch, eighth appropriation.....	Rio Grande river.....	May 30, 1890	6.50	93.76	4,957.82	405
San Luis Valley Canal, eighth appropriation.....	Rio Grande river.....	June 10, 1890	6.50	305.40	4,964.32	406
Rio Grande Canal, ninth appropriation.....	Rio Grande river.....	June 10, 1890	43.40	704.90	4,970.82	407
Monte Vista Canal, seventh appropriation.....	Rio Grande river.....	June 10 1890	49.20	441.74	5,014.22	408

Rio Grande Canal, tenth appropriation.....	Rio Grande river.....	July 24, 1890	52.00	756.90	5,063.42	409
Empire Canal, tenth appropriation.....	Rio Grande river.....	Aug. 4, 1890	29.00	864.18	5,115.42	410
Rio Grande Canal, eleventh appropriation.....	Rio Grande river.....	Date of decree	293.70	1,050.60	5,144.42	411
San Luis Valley, ninth appropriation.....	Rio Grande river.....	Date of decree	110.90	416.30	5,438.12	412
McIntosh Arroya Ditch, third appropriation.....	Rio Grande river.....	Date of decree	1.40	6.40	5,549.02	413
James Peterson Ditch, second appropriation.....	Rio Grande river.....	Date of decree	1.20	4.80	5,550.42	414
Rock Creek, Anderson and Cadle-Anderson Ditch, Consolidated, third appropriation.....	Rock creek.....	Date of decree	6.25	11.42	5,551.62	415
Sheridan South Ditch, third appropriation.....	Spring creek.....	Date of decree	5.00	8.00	5,557.87	416
Little Anna Ditch, third appropriation.....	Pinos creek.....	Date of decree	1.20	2.80	5,562.87	417
Little Daunbe Ditch, third appropriation.....	Pinos creek.....	Date of decree	2.30	5.60	5,564.07	418
Yarnell Ditch, second appropriation.....	Pinos creek.....	Date of decree	2.00	8.00	5,566.37	419
					5,568.37	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 20, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, JOHN D. McDONALD, MONTE VISTA, COLO. APPOINTED JUNE 4, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Miner's Creek Ditch	Miner's creek	Jan. 29, 1891	Oct. 30, 1890	12.00	D. W. Soward
The Kenilworth Canal Feeder	Arroya or slough	Mar. 20, 1891	Mar. 19, 1891	240.00	The Kenilworth Canal Company
The McKenzie Ditch	Miner's creek	April 1, 1891	Jan. 14, 1891	2.16	J. C. McKenzie
The Sunnyside Ditch	Miner's creek	April 1, 1891	Jan. 14, 1891	2.16	J. C. McKenzie
The Creede Water Works Pipe Lines	Willow and West Willow creek	Jan. 18, 1892	Jan. 12, 1892	40.00 40.00	George Croft Kirby
The John Grant Ditch	Shallow creek	April 6, 1892	April 1890	22.00	John Grant
The Helen and Julia Ditch	Rio Grande river	June 22, 1892	April 25, 1892	15.00	L. E. Campbell
The Campbell-Bauer Ditch	Sunnyside creek	June 23, 1892	June 26, 1892	15.00	L. E. Campbell and Philip Bauer
The Wason Deep Creek Ditch	Deep creek	July 5, 1892	June 3, 1887	7.00	M. V. B. Wason <i>et al.</i>
The Theo. J. Lakenan Ditch	Boulder creek	Aug. 1, 1892	1882	8.00	Theo. J. Lakenan
The Creede Ditch	Rio Grande river	Sept. 6, 1892	July 7, 1892	10.00	N. C. Creede
The Denison Rod and Gun Association's Ditch	Clear creek	Sept. 29, 1892	May 1880	9.25	The Denison Rod and Gun Association
The Weiss Deep Creek Ditch	Deep creek	Oct. 3, 1892	June 14, 1892	5.00	F. A. Weiss <i>et al.</i>
The Weiss Sunnyside Ditch	Sunnyside creek	Oct. 3, 1892	May 12, 1892	7.50	J. H. Weiss <i>et al.</i>

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 20, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Wason Deep Creek Reser- voir	Deep creek	{ Wason Deep } { Creek ditch }	July 5, 1892	June 3, 1887	Not given	M. V. B. Wason <i>et al.</i>
The Theo. J. Lakenan Reser- voir	Boulder creek	{ Theo. J. Lake- } { man ditch }	Aug. 1, 1892	1882	10,000,000	Theo. J. Lakenan
The Denison Rod and Gun- Association's Reservoir	Clear creek	An old channel	Sept. 29, 1892	May 1880	475,200	{ The Denison Rod and Gun Association }

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 21, GIVING THE DATE AND ORDER OF PRIORITY AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF THE COURT IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE AS FURNISHED BY THE CLERK OF THE COURT.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	Order of priority in district.
El Viego Ditch.....	Alamosa river.....	Aug. 1, 1867	19.20	.....	.....	1
Gomez Ditch.....	Alamosa river.....	Aug. 1, 1867	4.62	.....	19.20	2
Molino Ditch.....	Alamosa river.....	May 1, 1869	6.93	.....	23.82	3
Hansen La Jara Overflow No. 3 Ditch.....	La Jara river.....	March 1, 1870	21.28	.....	39.75	4
Swaup Ditch.....	La Jara river.....	March 1, 1870	2.49	.....	52.03	5
Garcia Ditch No. 1.....	La Jara river.....	March 1, 1870	4.62	.....	54.52	6
McCunniff Ditch.....	La Jara river.....	Mar. 31, 1870	16.60	.....	59.14	7
Jose Valdez Ditch.....	Alamosa river.....	April 8, 1870	16.50	.....	76.74	8
Valdez Ditch.....	Alamosa river.....	April 10, 1870	14.00	.....	93.24	9
Capulen Ditch.....	Alamosa river.....	April 12, 1870	31.37	.....	107.24	10
Gabino Gallegos.....	Alamosa river.....	April 15, 1870	16.00	.....	138.61	11

Valley Ditch.....	La Jara river.....	Apr. 20, 1870	21.12	154.61	12
Garcia Ditch No. 2.....	Alamosa river.....	Apr. 30, 1871	5.54	175.73	13
San Jose Ditch No. 2.....	Alamosa river.....	May 31, 1871	3.08	181.27	14
Cristobal Rivera Ditch.....	Alamosa river.....	Mar. 4, 1873	10.08	184.35	15
Jose E. Atencio Ditch.....	Hot creek.....	Apr. 11, 1873	6.93	194.43	16
San Jose No. 1.....	Alamosa river.....	Apr. 13, 1873	10.39	201.36	17
Romero Ditch.....	La Jara river.....	Apr. 13, 1873	7.68	211.75	18
Gallegos Ditch No. 4.....	Hot creek.....	Apr. 15, 1873	12.32	219.43	19
Gallegos Ditch No. 2.....	La Jara river.....	Apr. 30, 1873	11.08	231.75	20
Juan de Deos Vigil Ditch.....	Hot creek.....	May 5, 1873	11.08	242.83	21
Gallegos Ditch No. 1.....	Hot creek.....	May 5, 1873	11.08	253.91	22
Newcomb Brothers Ditch.....	La Jara river.....	May 14, 1873	11.52	264.99	23
Romaldo Valdez Ditch.....	Alamosa river.....	May 20, 1873	4.62	276.51	24
Le-mita Ditch.....	La Jara river.....	Apr. 15, 1874	6.93	281.13	25
Ramona Ditch.....	Alamosa river.....	Apr. 20, 1874	9.85	288.06	26
Head Overflow Ditch No. 5.....	Alamosa river.....	May 3, 1874	49.80	297.91	27
Le-mita Ditch No. 3.....	Hot creek.....	June 15, 1874	6.16	347.71	28
Alamoso and Spring Creek Ditch.....	Alamosa river.....	Nov. 30, 1874	5.76	353.87	29
Garden Ditch.....	Spring creek.....	Apr. 1, 1875	8.10	359.63	30
Aqua Caliente Ditch.....	Hot creek.....	May 5, 1875	15.40	367.73	31
Ortez Ditch.....	Alamosa river.....	May 15, 1875	14.02	383.13	32
Eskridge Spring Creek Ditch.....	Spring creek.....	May 16, 1875	3.36	397.15	33

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	Order of priority in district.
Sanches No. 1 Ditch	Hot creek	June 15, 1875	6.93	.....	400.51	34
Sanches No. 2 Ditch	Hot creek	July 1, 1875	6.93	.....	407.44	35
Arroya Ditch	Alamosa river	July 1, 1875	53.12	.....	414.37	36
T. K. Walsh Ditch	Alamosa river	May 1, 1876	6.93	.....	467.49	37
Union Ditch	Alamosa river	May 20, 1876	14.13	.....	474.42	38
Loretto Ditch	Alamosa river	June 1, 1876	10.83	.....	488.55	39
North Alamosa Ditch	Alamosa river	June 14, 1877	22.40	.....	499.38	40
Alamosa & Spring Creek Ditch, first extension	Alamosa river	July 1, 1877	18.14	23.90	521.78	41
Newcomb Brother's Ditch, first extension	La Jara river	Aug. 1, 1877	7.16	18.68	539.92	42
Sauco Ditch	La Jara river	April 15, 1878	9.60	.....	547.08	43
Cottonwood Ditch	Alamosa river	May 1, 1879	8.46	.....	556.68	44
Walsh Ditch	Alamosa river	Mar. 31, 1880	12.45	.....	565.14	45
Gallegos No. 3 Ditch	Alamosa river	April 1, 1880	14.94	.....	577.59	46
Penasco Ditch	La Jara river	April 2, 1880	3.36	.....	592.53	47
La Piedra Ditch	La Jara river	April 3, 1880	4.98	.....	595.89	48

Pino-Réal Ditch	La Jara river	May 1, 1880	7.20	-----	600.87	49
Thielkeld Ditch	Alamosa river	May 26, 1880	7.68	-----	608.07	50
Alamosa No. 1 Ditch	Alamosa river	May 31, 1880	14.52	-----	615.75	51
Fiskridge & Garrett Ditch	La Jara river	June 1, 1880	7.84	-----	630.27	52
Le Mita Ditch No. 2	La Jara river	June 5, 1880	7.20	-----	638.11	53
Alamosa and Spring Creek Ditch, second appropriation	Alamosa river	July 1, 1880	12.62	36.52	645.31	54
Cottonwood Ditch, first appropriation	Alamosa river	Aug. 1, 1880	5.65	14.11	657.93	55
Hard Tack Ditch	La Jara river	Mar. 10, 1881	18.45	-----	663.58	56
Lowland Ditch	La Jara river	April 1, 1881	14.94	-----	682.03	57
Clark Ditch	Alamosa river	April 10, 1881	6.75	-----	696.97	58
Alamos Ditch	La Jara river	April 10, 1881	6.93	-----	703.72	59
Overflow Ditch No. 4	Alamosa river	May 1, 1881	16.00	-----	710.65	60
Nate Garrett Ditch	La Jara river	June 14, 1882	7.80	-----	726.65	61
Union Ditch, first extension	Alamosa river	July 25, 1882	27.21	41.34	734.45	62
Lower La Jara Ditch	La Jara river	April 15, 1883	18.67	-----	775.79	63
Worcester Ditch	Alamosa river	May 25, 1883	11.83	-----	794.46	64
Lower La Jara Ditch, first extension	La Jara river	April 5, 1884	6.23	24.90	806.29	65
Overflow Ditch No. 2	Alamosa river	May 15, 1884	16.00	-----	812.52	66
Union Ditch, second extension	Alamosa river	May 15, 1884	76.30	117.64	828.52	67
Norland Ditch	Alamosa river	June 12, 1885	48.56	-----	904.82	68
Flintham Ditch	Alamosa river	June 26, 1885	24.90	-----	953.38	69
Miller Ditch	Alamosa river	Aug. 10, 1885	34.86	-----	978.28	70

STATEMENT CONCERNING DITCHES—Concluded.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch, canal or reservoir.	Cubic feet per second appropriated in district.	Order of Priority in district.
Overflow Ditch No. 1.....	Alamosa river.....	Oct. 5, 1885	112.00	.....	1,013.14	71
E'd. Newcomb Ditch.....	Alamosa river.....	June 1, 1886	13.28	.....	1,125.14	72
Morganville Ditch.....	Alamosa river.....	June 1, 1886	20.75	.....	1,138.42	73
Plano-Vista Ditch.....	Alamosa river.....	Nov. 10, 1886	29.81	.....	1,159.17	74
Miller Ditch, first extension.....	Alamosa river.....	Nov. 11, 1886	31.54	66.40	1,188.98	75
Davies-Chapman Ditch.....	Alamosa river.....	Mar. 12, 1887	51.87	.....	1,220.52	76
North Alamosa Ditch, first extension.....	Alamosa river.....	Mar. 31, 1887	27.39	49.79	1,272.39	77
Alamosa Ditch No. 1, first extension.....	Alamosa river.....	April 1, 1887	5.29	19.81	1,299.78	78
Nate Garrett Ditch, first extension.....	La Jara river.....	April 1, 1887	5.65	13.45	1,305.07	79
Alamosa and Spring Creek Ditch, third extension.....	Alamosa river.....	April 20, 1887	26.22	62.74	1,310.72	80
Lower La Jara Ditch, second extension.....	La Jara river.....	May 1, 1887	19.92	44.82	1,336.94	81
Cottonwood Ditch, second extension.....	Alamosa river.....	June 2, 1887	21.59	35.70	1,356.86	82
Union Ditch, third extension.....	Alamosa river.....	June 27, 1887	145.00	262.64	1,378.45	83
Scandinavian Canal.....	Alamosa river.....	July 7, 1887	43.58	.....	1,523.45	84
Alamosa Creek Canal.....	Alamosa river.....	Aug. 26, 1887	166.05	.....	1,567.03	85

Baker Ditch.....	Alamosa river.....	Aug. 30, 1887.....	12.45	-----	1,733.08	86
Codington Ditch.....	La Jara river.....	Aug. 30, 1887.....	29.88	-----	1,745.53	87
Ribera Ditch.....	Alamosa river.....	Sept. 23, 1887.....	28.80	-----	1,775.41	88
Madril Ditch.....	Alamosa river.....	Sept. 23, 1887.....	12.45	-----	1,804.21	89
Valdez Ditch, first extension.....	Alamosa river.....	Sept. 23, 1887.....	72.63	86 63	1,816.66	90
Hilario Ditch.....	Alamosa river.....	Feb. 20, 1888.....	3.61	-----	1,889.29	91

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 21, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892. —COMMISSIONER, ROMALDO ORTIZ, CAPULINA, COLO. APPOINTED 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Arroya Lake Spring Ditch	Springs.....	June 26, 1891	Aug. 31, 1889	4.00	..... James R. Patton
The J. W. L. Ditch.....	Alamosa creek....	Dec. 29, 1891	June 15, 1891	116.27	..... Wm. B. Wells and Chas. A. Johnson

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 23, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS ESTABLISHED BY THE DECREE OF COURT IN THE JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE AS FURNISHED BY THE CLERK OF THE COURT.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in district.	Order of priority in district.
Guadalupe Main Ditch	Conejos river	Mar. 1, 1855	69.82			1
Head's Mill and Irrigating Ditch	Conejos river	June 1, 1855	177.14		69.82	2
El Coda Ditch	San Antonio	Aug. 4, 1855	25.18		186.96	3
Llano Ditch	Los Pinos creek	Aug. 20, 1855	31.84		212.14	4
Garcia Ditch	Conejos river	Oct. 1, 1855	6.23		243.98	4½
Serrietta Ditch	Conejos river	Mar. 5, 1856	31.77		250.21	5
Seledonia Valdez Irrigating and Mill Ditch	Conejos river	Mar. 20, 1856	31.77		281.98	6
Los Pinos Ditch	Los Pinos creek	April 1, 1856	22.94		313.75	7
Salazar Ditch	Conejos river	April 1, 1856	12.32		336.09	8
Mill Ditch	Conejos river	April 1, 1865	12.67		349.01	9
San Jose Ditch	Conejos river	April 15, 1856	40.28		361.68	10

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet previously appropriated in district.	Order of priority in district.
Sincero Ditch.....	San Antonio river.....	April 15, 1856	18.31		401.96	11
Del Puerticitito Ditch.....	Conejos river.....	April 30, 1856	8.76		420.27	12
San Rafael and Conejos Ditch.....	Conejos river.....	May 1, 1856	8.81		429.03	13
El Senito Ditch.....	Conejos river.....	May 30, 1856	6.19		437.84	14
Gabriel Martinez Ditch.....	Conejos river.....	Aug. 1, 1856	.71		444.03	15
Santiago Ditch.....	Conejos river.....	April 1, 1857	55.59		444.74	16
Garcia Ditch, first enlargement.....	Conejos river.....	April 1, 1857	6.09	12.32	500.33	17
Archuleta and Trujillo Ditch, No. 1.....	Conejos river.....	April 1, 1857	8.81		506.42	18
Archuleta and Trujillo Ditch, No. 2.....	Natural springs.....	April 1, 1857	14.94		515.23	19
Overflow Ditch.....	Conejos river.....	April 10, 1857	11.79		530.17	20
Trujillo Ditch.....	Conejos river.....	April 15, 1857	29.80		541.96	21
Cañon Irrigating Ditch.....	Conejos river.....	April 15, 1857	42.89		571.76	22
La Del Rio Ditch.....	Conejos river.....	April 30, 1857	31.44		614.65	23
Rincones Ditch.....	San Antonio and Conejos rivers.....	May 15, 1857	22.25		646.09	24
Puerticitos Ditch.....	Conejos river.....	April 1, 1858	31.47		668.34	25

Mecitos Ditch	Sept. 1, 1858	38.99	-----	699.81	26
San Juan and San Rafael Ditch	April 1, 1861	47.76	-----	738.80	27
San Rafael and Conejos Ditch, first enlargement	April 1, 1862	8.81	17.62	785.56	28
Espinosa Ditch	April 1, 1862	19.54	-----	795.37	29
Trujillo Ditch, first enlargement	April 1, 1863	23.68	-----	814.91	30
Chacon Ditch No. 1	May 1, 1863	18.31	-----	838.59	31
La Sauces Ditch	May 20, 1867	88.43	-----	856.90	32
Larato Irrigating Ditch	June 14, 1867	27.58	-----	945.33	33
Jose Bon facio Romero Ditch	Mar. 1, 1870	56.97	-----	972.91	34
Bernardo Romero Ditch	Mar. 15, 1870	9.26	-----	1,029.88	35
Galbis Ditch	July 1, 1870	10.97	-----	1,039.14	36
Sanches Ditch	Aug. 20, 1870	27.26	-----	1,050.11	37
J. F. Chacon Ditch No. 3	July 1, 1872	18.31	-----	1,077.37	38
Sabine School Section Ditch	May 1, 1873	11.95	-----	1,095.68	39
Jose Decedario Martinez Ditch	July 31, 1873	9.26	-----	1,107.63	40
Vega Grande Ditch	April 1, 1875	5.77	-----	1,116.89	41
An Con Irrigating Ditch	April 1, 1876	10.80	-----	1,122.66	42
Wm. Stewart & Co. Irrigating Ditch	June 30, 1876	11.40	-----	1,133.46	43
J. F. Chacon Ditch No. 2	Oct. 15, 1877	7.54	-----	1,144.86	44
Lorato Ditch	Mar. 1, 1878	7.54	-----	1,152.40	45
Vega Grande Ditch, first enlargement	April 1, 1878	5.77	11.54	1,159.94	46
McCarroll Ditch	May 1, 1878	13.72	-----	1,165.71	47

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each property.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Manassa Ditch.....	Conejos river.....	May 1, 1879.....	73.60.....	-----	1,179.43.....	48
J. F. Chacon Ditch No. 2, first enlargement.....	Conejos river.....	Nov. 10, 1879.....	4.54.....	12.08.....	1,253.03.....	49
William Sabine Ditch No. 1.....	Conejos river.....	April 1, 1880.....	7.71.....	-----	1,257.57.....	50
Martinez Ditch.....	Conejos river.....	April 1, 1880.....	15.84.....	-----	1,265.28.....	51
J. M. Espinosa Ditch.....	Natural springs.....	April 1, 1880.....	26.00.....	-----	1,281.12.....	52
Cordova Ditch.....	Conejos river.....	April 1, 1880.....	6.54.....	-----	1,307.12.....	53
Chaves Ditch.....	San Antonio river.....	May 1, 1880.....	12.72.....	-----	1,313.66.....	54
Jack's Irrigating Ditch.....	Conejos river.....	Mar. 25, 1881.....	8.12.....	-----	1,326.38.....	55
Ephraim Ditch.....	Conejos river.....	Mar. 28, 1881.....	47.00.....	-----	1,334.50.....	56
Martinez Ditch (on San Antonio Creek).....	San Antonio river.....	April 15, 1881.....	13.68.....	-----	1,381.50.....	57
Los Ojos Ditch No. 2.....	Conejos river.....	May 1, 1881.....	5.95.....	-----	1,395.18.....	58
Richfield Canal.....	Conejos river.....	Oct. 12, 1881.....	\$6.24.....	-----	1,401.13.....	59
Loma Parda Ditch.....	Conejos river.....	Feb. 15, 1882.....	10.31.....	-----	1,457.37.....	60
Beecroft Irrigating Ditch.....	Conejos river.....	April 15, 1882.....	7.54.....	-----	1,467.68.....	61
William Sabine Ditch No. 2.....	Conejos river.....	May 1, 1882.....	7.71.....	-----	1,475.22.....	62

Los Ojos Ditch No. 1.....	July 10, 1882	44.16	-----	1,482.93	63
Elledges Ditch.....	April 1, 1883	7.52	-----	1,527.09	64
Augustura Ditch.....	April 1, 1883	42.72	-----	1,534.61	65
North Eastern Ditch.....	April 21, 1883	34.71	-----	1,577.33	66

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 22.—ADJUDICATION OF 1890.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	Order of priority in district.
La Vega de la Servilleta Ditch.....	Conejos river.....	Apr. 21, 1883	6.75	-----	1,612.04	67
Cruz Chaves Ditch.....	Conejos river.....	Apr. 21, 1883	1.00	-----	1,618.79	68
San Rafael and Conejos Ditch, second enlargement.....	Conejos river.....	Apr. 21, 1883	4.00	21.62	1,619.79	69
La Manga Ditch.....	San Antonio river.....	Apr. 21, 1883	4.00	-----	1,623.79	70
Broyles Overflow Ditch No. 1.....	San Antonio river.....	Apr. 21, 1883	1.50	-----	1,627.79	71
Broyles Overflow Ditch No. 2.....	San Antonio river.....	Apr. 21, 1883	2.50	-----	1,629.29	72
Broyles Overflow Ditch No. 3.....	San Antonio river.....	Apr. 21, 1883	1.50	-----	1,631.79	73
Jaramillo Overflow Ditch No. 1.....	San Antonio river.....	Apr. 21, 1883	2.00	-----	1,633.29	74
Jaramillo Overflow Ditch No. 2.....	San Antonio river.....	Apr. 21, 1883	2.00	-----	1,635.29	75
La Vega Ditch.....	Conejos river.....	Apr. 21, 1883	6.40	-----	1,637.29	76
McCarroll Ditch.....	Mill creek.....	Apr. 21, 1883	7.00	-----	1,643.69	77
Le Duc.....	Conejos river.....	Apr. 21, 1883	3.00	-----	1,650.69	78

Home Ditch.....	Conejos river	April 21, 1883	4.50	1,653.69	79
Ball Bro.'s Overflow Ditch No. 1.....	Conejos river	April 21, 1883	22.00	1,658.19	80
Ball Bro.'s Overflow Ditch No. 2.....	Conejos river	April 21, 1883	20.00	1,680.19	81
Hughes' Overflow Ditch No. 1.....	San Antonio river	April 21, 1883	12.00	1,700.19	82
Hughes' Overflow Ditch No. 2.....	San Antonio river	April 21, 1883	6.00	1,712.19	83
Manassa Ditch No. 2.....	Conejos river	April 21, 1883	23.25	1,718.19	84
Floyd Overflow Ditch No. 1.....	San Antonio river	April 21, 1883	1.50	1,741.44	85
Floyd Overflow Ditch No. 2.....	San Antonio river	April 21, 1883	2.25	1,742.94	86
Floyd Overflow Ditch No. 3.....	San Antonio river	April 21, 1883	5.00	1,745.19	87
East Bend Ditch.....	Conejos river	April 21, 1883	15.00	1,750.19	88
Smith Bro.'s Ditch.....	Conejos river	April 21, 1883	8.00	1,765.19	89
Gallegos & Lopez.....	San Antonio river	April 21, 1883	1.50	1,773.19	90
La Vega Ditch, first enlargement.....	Conejos river	April 23, 1883	2.00	1,774.69	91
Gallegos Northside Ditch.....	San Antonio river	April 21, 1883	3.50	1,776.69	92
La Manga Ditch, first enlargement.....	San Antonio river	Sept. 10, 1883	4.00	1,780.19	93
Punche Ditch.....	San Antonio river	April 23, 1883	15.00	1,784.19	94
Cottonwood Ditch.....	Conejos river	April 10, 1884	28.50	1,799.19	95
A. D. Archuleta Ditch.....	Conejos river	April 20, 1884	8.00	1,827.69	96
J. P. Chacon Ditch No. 2, second enlargement.....	Conejos river	May 1, 1884	2.00	1,835.69	97
Manassa Westfield Ditch.....	Conejos river	Feb. 15, 1885	30.00	1,837.69	98
Bagwell Ditch.....	Conejos river	Mar. 13, 1885	7.00	1,867.69	99
An Con Ditch, first enlargement.....	Conejos river	April 23, 1825	8.00	1,874.69	100

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
East Bend Ditch, first enlargement	Conejos river.	May 20, 1885	4.00	19.00	1,882.69	101
Fox Creek Ditch No. 2.	Fox creek	May 30, 1885	1.50	-----	1,886.69	102
East Bend Ditch, second enlargement	Conejos river	Aug. 31, 1885	3.75	22.75	1,888.19	103
Sanford Ditch.	Conejos river.	Oct. 20, 1885	107.50	-----	1,891.94	104
Richfield Ditch, first enlargement.	Conejos river.	Oct. 20, 1885	112.50	168.74	1,999.44	105
La Vega Ditch, second enlargement	Conejos river.	Dec. 31, 1885	3.00	11.40	2,111.94	106
Fox Creek Ditch No. 1.	Fox creek.	April 1, 1886	2.50	-----	2,114.94	107
Alamo Ditch.	Conejos river.	April 15, 1886	36.00	-----	2,117.44	108
East Bend Ditch, third enlargement.	Conejos river.	Aug. 31, 1886	3.65	26.40	2,153.44	109
East Bend Ditch, fourth enlargement	Conejos river.	Jan. 26, 1887	4.00	30.40	2,157.09	110
Servietta Ditch, first enlargement	Conejos river.	April 1, 1887	4.00	35.77	2,161.09	111
Manassa-Westfield Ditch, first enlargement.	Conejos river.	April 11, 1887	24.00	54.00	2,165.09	112
Antonio Ditch.	Conejos river.	April 25, 1887	250.00	-----	2,189.09	113
Lobato & Cordova Ditch.	San Antonio river	May 10, 1887	8.00	-----	2,439.09	114
Magote Ditch.	Conejos river.	June 2, 1887	342.40	-----	2,447.09	115

Florida Ditch	San Antonio river	Aug. 27, 1886	20.80	2,789.49	116
La Manga Ditch, second enlargement	San Antonio river	Sept. 10, 1886	2.00	10.00	117
Gallegos and Lopez Ditch, first enlargement	San Antonio river	Sept. 10, 1886	2.50	4.00	118
North Eastern Ditch, first enlargement	Conejos river	Oct. 21, 1886	41.25	75.96	119
Branch Ditch	Conejos river	Nov. 1, 1886	12.00	2,856.04	120
East Bend Ditch, fifth enlargement	Conejos river	Nov. 8, 1886	4.00	34.40	121
Taos Valley Canal No. 1	Conejos river	Nov. 28, 1886	500.00	2,872.04	122
Paine Ditch No. 1	Conejos river & springs	Feb. 11, 1888	1.50	3,372.04	123
Paine Ditch No. 2	Conejos river & springs	Feb. 11, 1888	4.00	3,373.54	124
East Bend, sixth enlargement	Conejos river & springs	Feb. 28, 1888	4.00	38.40	125
Berkshire Farm Ditch	Conejos river	Mar. 15, 1888	12.00	3,381.54	126
North Eastern Ditch, second enlargement	Conejos river	Mar. 20, 1888	46.84	122.80	127
Martinez (on San Antonio), Ditch, first enlargement	San Antonio river	Mar. 24, 1888	26.00	39.68	128
Servietta Ditch, second enlargement	Conejos river	April 1, 1888	4.00	39.77	129
Carpe & Reeker's Canon Ditch	Conejos river	April 5, 1888	16.00	3,466.38	130
Stover Ditch	Conejos river	April 20, 1888	2.50	3,470.38	131
Mogales Valley Ditch	Conejos river	June 30, 1888	12.00	3,486.38	132
Au Con Irrigating Ditch, second enlargement	Conejos river	Aug. 18, 1888	11.04	3,488.88	133
Taos Valley Ditch No. 2	San Antonio river	Aug. 25, 1888	500.00	29.84	134
East Bend Ditch, seventh enlargement	Conejos river	Aug. 31, 1888	4.00	43.40	135
Jose Bonifacio Romero Ditch, first enlargement	Conejos river	Oct. 3, 1888	25.00	81.97	136
Alamo Ditch, first enlargement	Conejos river	Oct. 25, 1888	16.00	52.00	137

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
East Bend Ditch, eighth enlargement	Conejos river	Aug. 31, 1889	3.00	45.40	4,056.92	138
Brazos Del Norte Ditch	Conejos river	Mar. 25, 1889	20.00		4,059.92	139
Le Duc Ditch, first enlargement	Conejos river	May 1, 1889	2.00	5.00	4,079.92	140
Taos Valley Ditch No. 3	San Antonio river	May 10, 1889	500.00		4,081.92	141
J. F. Chacon Ditch No. 2, third enlargement	Conejos river	May 15, 1889	2.00	16.08	4,581.92	142
San Juan and San Rafael Ditch, first enlargement	Conejos river	July 20, 1889	4.00	51.76	4,583.92	143
Le Duc Ditch, second enlargement	Conejos river	Aug. 31, 1889	1.00	6.00	4,587.92	144
					4,588.92	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 22, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, A. M. VIGIL, CONEJOS, COLORADO. APPOINTED APRIL
15, 1887.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Peters Ditch	Conejos river	April 6, 1891	March 1891	7.00	..... Peter Rasmussen

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT No. 22, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Enlargement of Cove Lake Reservoir	San Antonio and } Concejos creeks. }	Toltec canal	Sept. 1, 1892	Feb. 5, 1892	425,000,000	The Toltec Canal Company

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 24, GIVING THE DATE AND ORDER OF PRIORITY AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF COURT IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE, AS FURNISHED BY THE CLERK OF THE COURT.—COMMISSIONER, A. CHAVEZ, SAN LUIS, COLO. APPOINTED 1890.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second priority.	Sum in addition of decrees to each ditch or canal.	Cubic feet per second previously appropriated in district.	Order of priority in district.
The San Luis Peoples Ditch	Culebra creek	April 10, 1852	23.00	—	—	1
The San Pedro Ditch	Culebra river	April 1852	19.50	—	23.00	2
The Acequia Madrie Ditch	Costilla creek	1853	22.50	—	42.50	3
The Montez Ditch	Rito Seco creek	Aug. 1853	1.00	—	65.00	4
The Valjeos Ditch	Vallejos creek	Mar. 1854	17.00	—	66.00	5
The Manzanaro Ditch	Costilla creek	April 1854	23.00	—	83.00	6
The Acequiacita Ditch	Costilla creek	April 1855	1.00	—	106.00	7
The San Acacio Ditch	Culebra river	April 1856	46.00	—	107.00	8
The Madriles Ditch	Costilla creek	April 1856	12.00	—	153.00	9
The Chalifa Ditch	Costilla creek	April 1857	10.00	—	165.00	10
The Cerro Ditch	Culebra creek	Nov. 1857	40.00	—	175.00	11

STATEMENT CONCERNING DITCHES—Concluded.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Francisco Sanchez Ditch.....	Culebra creek.....	Mar. 1858	12.50		215.00	12
The Mestas Ditch.....	Vallejos creek.....	May 1858	4.50		227.50	13
The San Francisco Ditch.....	San Francisco creek.....	May 1860	16.00		232.00	14
The Trujillo Ditch.....	Costilla creek.....	May 1861	1.00		248.00	15
The Little Rock Ditch.....	San Francisco creek.....	1873	1.00		249.00	16
The García Ditch.....	.....	1873	1.00		250.00	17
The Torcido Ditch.....	.....	1874	1.00		251.00	18
The Abando Martin Ditch.....	Torcido creek.....	May 1874	3.50		252.00	19
The Guadalupe Vigri Ditch.....	Vallejos creek.....	May 1880	4.00		255.50	20
The J. M. J. Maez Ditch.....	Ventero creek.....	Mar. 1881	1.50		259.50	21
The Antonio Pando Ditch.....	Culebra creek.....	April 1881	1.25		261.00	22
The Guadalupe Sanchez Ditch.....	Culebra creek.....	Nov. 1882	3.25		262.25	23
					265.50	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 25, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS ESTABLISHED BY THE DECREE OF COURT, IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE, AS FURNISHED BY THE CLERK OF THE COURT.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second allotted to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
Wells Middle Ditch	Kerber creek	April 1, 1866	.60			1
Wells North Ditch	Kerber creek	April 1, 1866	.40		.60	1
Wells Kerber Ditch	Kerber creek	April 1, 1866	2.20		1.00	1
Dittrich Steele Ditch	San Luis creek	May 1, 1867	1.40		3.20	2
Dittrich Ditch No. 1	San Luis creek	May 1, 1867	.20		4.60	2
Dittrich Ditch No. 2	San Luis creek	May 1, 1867	.20		4.80	2
Dittrich Ditch No. 3	San Luis creek	May 1, 1867	1.00		5.00	2
Dittrich Ditch No. 4	San Luis creek	May 1, 1867	.40		6.00	2
Steele Ditch No. 2	San Luis creek	May 15, 1867	1.60		6.40	3
Hoffman Ditch	Cotton creek	Mar. 15, 1868	2.40		8.00	4
Neidhardt Ditch	Cotton creek	Mar. 15, 1868	4.40		10.40	4

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Baca Grant No. 4, Irrigating Ditch No. 3.....	North Crestone arroya	June 1, 1869	4.00	-----	14.80	5
Baca Grant No. 4, Irrigating Ditch No. 4.....	South Crestone creek	June 1, 1869	7.00	-----	18.80	5
Major Creek Ditch.....	Major creek	Mar. 1, 1870	3.90	-----	25.80	6
Neidhardt Ditch, first extension.....	Cotton creek	Mar. 15, 1870	1.00	5.40	29.70	7
Garner Ditch No. 1.....	Garner creek	April 1, 1870	6.40	-----	30.70	8
Cotton Creek Ditch.....	Cotton creek	May 1, 1870	2.90	-----	37.10	9
Beca Grant No. 4, Irrigating Ditch No. 9.....	Crestone creek	May 1, 1870	20.00	-----	39.10	9
Baca Grant No. 4, Irrigating Ditch No. 11.....	Crestone creek	May 1, 1870	9.00	-----	59.10	9
Baca Grant No. 4, Irrigating Ditch No. 12.....	Crestone creek	May 1, 1870	17.00	-----	68.10	9
Baca Grant No. 4, Irrigating Ditch No. 13.....	Crestone creek	May 1, 1870	5.40	-----	85.10	9
Wales & Shellabarger Ditch No. 1.....	Rito Alto	May 1, 1870	4.40	-----	90.50	9
Squire's Ditch No. 1.....	San Luis creek	May 1, 1870	4.00	-----	94.90	9
Baca Grant No. 4, Irrigating Ditch No. 5.....	North Crestone creek	May 10, 1870	3.20	-----	98.90	10
Baca Grant No. 4, Irrigating Ditch No. 6.....	North Crestone creek	May 10, 1870	4.00	-----	102.10	10
Baca Grant No. 4, Irrigating Ditch No. 7.....	North Crestone creek	May 10, 1870	4.00	-----	106.10	10

Baca Grant No. 4, Irrigating Ditch No. 14.....	S. Branch San Isabel cr'k	May 10, 1870	3.92	110.10	10
Baca Grant No. 4, Irrigating Ditch No. 15.....	Willow creek	May 10, 1870	29.00	114.02	10
Baca Grant No. 4, Irrigating Ditch No. 16.....	Willow creek	May 10, 1870	26.00	143.02	10
Baca Grant No. 4, Irrigating Ditch No. 17.....	Willow creek	May 10, 1870	11.60	169.02	10
Baca Grant No. 4, Irrigating Ditch No. 18.....	Willow creek	May 10, 1870	2.40	180.62	10
Baca Grant No. 4, Irrigating Ditch No. 19.....	Spanish creek	May 10, 1870	39.80	183.02	10
Baca Grant No. 4, Irrigating Ditch No. 20.....	Spanish creek	May 10, 1870	5.40	222.82	10
Baca Grant No. 4, Irrigating Ditch No. 21.....	Cottonwood creek	May 10, 1890	4.00	228.22	10
Baca Grant No. 4, Irrigating Ditch No. 22.....	Cottonwood creek	May 10, 1870	70.00	232.22	10
Baca Grant No. 4, Irrigating Ditch No. 23.....	Cottonwood creek	May 10, 1870	20.40	302.22	10
Baca Grant No. 4, Irrigating Ditch No. 24.....	Deadman creek	May 10, 1870	10.00	322.62	10
Baca Grant No. 4, Irrigating Ditch No. 25.....	Deadman creek	May 10, 1870	24.00	332.62	10
Baca Grant No. 4, Irrigating Ditch No. 26.....	Deadman creek	May 10, 1870	6.00	356.62	10
Baca Grant No. 4, Irrigating Ditch No. 27.....	Deadman creek	May 10, 1870	2.76	362.62	10
Baca Grant No. 4, Irrigating Ditch No. 28.....	Deadman creek	May 10, 1870	1.00	365.38	10
Clayton Ditch "F".....	Kerber creek	May 15, 1870	.80	366.38	11
San Isabel Ditch.....	San Isabel creek	June 1, 1870	2.80	367.18	12
The North Ditch.....	San Isabel creek	June 1, 1870	1.20	369.98	12
Baca Grant No. 4, Irrigating Ditch No. 8.....	South Crestone Arroyo	June 1, 1870	3.80	371.18	12
Wales & Travis Ditch.....	Rito Alto creek	June 1, 1870	3.60	374.98	12
Wales Ditch No. 1.....	Rito Alto creek	June 1, 1870	1.00	378.58	12
Wales Ditch No. 2.....	Rio Alto creek	June 1, 1870	.80	379.58	12

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
Cotton Creek Ditch, first extension	Cotton creek	June 1, 1870	1.60	3.60	380.38	12
Hoffman Ditch, first extension	Cotton creek	June 15, 1870	.60	3.00	381.98	13
Baca Grant No. 40 Irrigating Ditch No. 10	Crestone creek	July 1, 1870	22.40	—	382.58	14
Wales & Shellabarger Ditch No. 3	Rito Alto creek	July 1, 1870	4.40	—	404.98	14
Schultz-Dittrich Ditch No. 18	San Luis creek	Sept. 1, 1870	2.80	—	409.38	15
San Luis Company Ditch	San Luis creek	Nov. 1, 1870	7.29	—	412.18	16
Steele Creek Ditch	Steele creek	April 1, 1871	4.20	—	419.47	17
Hot Spring Creek Ditch	Hot Spring creek	May 1, 1871	3.56	—	423.67	18
Clayton Ditch "E"	Cottonwood creek	Mar. 25, 1872	4.00	—	427.63	19
Clayton Ditch "D"	Kerber creek	Mar. 25, 1872	4.40	—	431.63	19
Petersons Ditch No. 1	Wild Cherry creek	April 1, 1872	3.00	—	436.03	20
Wales Ditch No. 3	Rito Alto creek	May 1, 1872	4.00	—	439.03	21
Neidhardt Ditch, second extension	Cotton creek	May 1, 1872	2.20	7.60	443.03	21
San Isabel Ditch, first extension	San Isabel creek	June 1, 1872	2.30	5.10	445.23	22
Schilling Ditch	Spring br'n San Luis c'k	July 1, 1872	2.80	—	447.53	23

Cotton Creek Ditch, second extension.....	Cotton creek.....	July 10, 1872	2.00	5.60	450.33	24
Wales & Shellebarger Ditch No. 2, first extension.....	Rito Alto creek.....	Oct. 1, 1872	6.40	10.80	452.33	25
Wales & Shellebarger Ditch No. 1, first extension.....	Rito Alto creek.....	Nov. 1, 1872	2.20	6.60	458.73	26
Shellebarger Home Ditch No. 1.....	Rito Alto creek.....	Dec. 16, 1872	2.40	---	460.93	27
Shellebarger Home Ditch No. 2.....	Rito Alto creek.....	Dec. 20, 1872	3.00	---	463.33	28
Tobler Ditch.....	San Luis creek.....	Feb. 15, 1873	.40	---	466.33	29
H. H. Wales Ditch.....	Rito Alto creek.....	April 1, 1873	.80	---	466.73	30
Greer Ditch No. 1.....	San Luis creek.....	April 1, 1873	2.80	---	467.53	30
Schultze-Dittrich Ditch, first extension.....	San Luis creek.....	April 1, 1873	5.40	8.20	470.33	30
Daniels & Fish No. 4 Ditch.....	Kerber creek.....	April 15, 1873	2.00	---	475.73	31
Gordon Ditch.....	Cotton creek.....	May 1, 1873	1.40	---	477.73	32
Cotton Creek Ditch, third extension.....	Cotton creek.....	May 1, 1873	1.80	7.40	479.13	32
Neidhardt Ditch, third extension.....	Cotton creek.....	May 1, 1873	2.60	10.20	480.93	32
Kennedy Ditch No. 1.....	San Luis creek.....	May 15, 1873	2.00	---	483.53	33
Kennedy Ditch No. 2.....	---	May 15, 1873	9.80	---	485.53	35
Shellebarger & Eaton Ditch.....	---	May 20, 1873	.50	---	495.33	34
Steele Ditch No. 1.....	San Luis creek.....	June 1, 1873	1.00	---	495.83	35
Greer Ditch No. 2.....	San Luis creek.....	June 1, 1873	3.20	---	496.83	35
Steele Ditch No. 2, first extension.....	San Luis creek.....	June 1, 1873	2.20	3.80	500.03	35
Tobler-Rominger Ditch.....	San Luis creek.....	June 15, 1873	10.00	---	502.23	36
San Luis Ditch.....	San Luis creek.....	July 1, 1873	4.00	---	512.23	37
Clayton Old Channel Ditch.....	Kerber creek.....	Aug. 15, 1873	2.40	---	516.23	38

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated and previously in the district.	Order of priority in district.
Wales San Luis Ditch No. 1.....	San Luis creek.....	Sept. 1, 1873	3.20	-----	518.83	39
Wales San Luis Ditch No. 2.....	San Luis creek.....	Sept. 1, 1873	1.60	-----	521.83	39
Wales Ditch No. 4.....	Rito Alto creek.....	Dec. 2, 1873	1.60	-----	523.43	40
Wales Ditch No. 2, first extension.....	Rito Alto creek.....	Dec. 2, 1873	1.00	1.80	525.03	40
Peterson Ditch No. 1, first extension.....	Wild Cherry creek.....	April 1, 1874	6.50	9.50	526.03	41
Hills Ditch No. 1.....	Kerber creek.....	April 15, 1874	.72	-----	532.53	42
Wales & Travis Ditch, first extension.....	Rito Alto creek.....	May 1, 1874	3.30	6.90	533.25	43
Sanchez Ditch.....	Cotton creek.....	May 15, 1874	.50	-----	536.55	44
Cotton Creek Ditch, fourth extension.....	Cotton creek.....	May 15, 1874	3.60	11.00	537.05	44
The Sanford Ditch.....	Rito Alto creek.....	June 1, 1874	2.40	-----	540.65	45
Greer Ditch No. 2.....	San Luis creek.....	June 1, 1874	3.20	-----	543.05	45
Hills Ditch No. 2.....	Kerber creek.....	June 1, 1874	.30	-----	546.25	45
Hills Ditch No. 4.....	Kerber creek.....	June 1, 1874	.08	-----	546.55	45
San Isabel Ditch, second extension.....	San Isabel creek.....	June 1, 1874	5.10	10.20	546.63	45
North Ditch, first extension.....	San Isabel creek.....	June 1, 1874	3.60	4.80	551.73	45

Hills Ditch No. 3.	Kerber creek.	June 10, 1874	.16	-----	555.33	46
Clayton Ditch "A"	Kelley creek.	July 1, 1874	2.40	-----	555.49	47
Clayton Ditch "B"	Kelley creek.	July 1, 1874	4.00	-----	557.89	47
San Luis Company Ditch, first extension.	San Luis creek.	July 15, 1874	5.46	12.75	561.89	48
Garner Ditch No. 2.	San Luis creek.	Aug. 15 1874	2.00	-----	567.35	49
Hall Ditch No. 1.	Kerber creek.	April 5, 1875	5.30	-----	569.35	50
Hoffman Ditch No. 2.	Major creek.	May 1, 1875	.90	-----	574.65	51
Spiegel Ditch.	San Luis creek.	May 1, 1875	2.25	-----	575.55	51
Hice Ditch No. 1.	Clover creek.	May 1, 1875	1.50	-----	577.80	51
Hice Ditch No. 2.	Clover creek.	May 1, 1875	1.20	-----	579.30	51
Hice Ditch No. 3.	Clover creek.	May 1, 1875	2.00	-----	580.50	51
Hice Ditch No. 4.	Clover creek.	May 1, 1875	.20	-----	582.50	51
Hice Ditch No. 5.	Clover creek.	May 1, 1875	.80	-----	582.70	51
Hice Ditch No. 6.	San Luis creek.	May 1, 1875	.70	-----	583.50	51
Hice Ditch No. 7.	Gooseberry creek.	May 1, 1875	.30	-----	584.20	51
Hice Ditch No. 8.	San Luis creek.	May 1, 1875	.70	-----	584.50	51
Peterson Ditch No. 1, second extension.	Wild Cherry creek.	May 1, 1875	.70	10.50	585.20	51
Cotton Creek Ditch, fifth extension.	Cotton creek.	May 15, 1875	6.40	17.40	585.90	52
Hoffman Ditch, second extension.	Cotton creek.	Oct. 1, 1875	.40	3.40	592.30	53
Neidhardt Ditch, fourth extension.	Cotton creek.	Oct. 1, 1875	.20	10.40	592.70	53
Wales San Luis Ditch No. 2, first extension.	San Luis creek.	Jan. 1, 1876	1.60	3.20	592.90	54
Arthur Young.	San Luis creek.	April 1, 1876	16.00	-----	594.50	55

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
Daniels & Fish Arroya Ditch	Kerber creek	Apr. 15, 1876	3.20	---	610.50	56
Daniels & Fish Ditch No. 4, first extension	Kerber creek	Apr. 15, 1876	2.80	4.80	613.70	56
Allen Ditch No. 1	Crestone creek	May 10, 1876	1.60	---	616.50	57
Baca Grant No. 4, Irrigating Ditch No. 12, first extension	Crestone creek	May 10, 1876	11.20	28.20	618.10	57
B. Clark Ditch	Alder creek	June 1, 1876	1.40	---	629.30	58
Wales San Luis Ditch No. 1, first extension	San Luis creek	June 1, 1876	3.20	6.40	630.70	58
North Ditch, second extension	San Isabel creek	June 1, 1876	1.50	6.30	633.90	58
San Isabel Ditch, third extension	San Isabel creek	June 1, 1876	1.50	11.70	635.40	58
Howard & Hall Ditch	San Luis creek	July 20, 1876	1.30	---	636.90	59
Heukauffer Ditch No. 2	North Crestone creek	Apr. 1, 1878	.30	---	638.20	60
Well Kerber Ditch, first extension	---	Apr. 1, 1878	2.00	4.20	638.50	60
Allen Ditch No. 1, first extension	---	May 10, 1878	1.60	3.20	640.50	61
Baca Grant No. 4, Irrigating Ditch No. 12, second extension	Crestone creek	May 10, 1878	3.20	31.40	642.10	61
Ford Ditch, No. 1	San Luis creek	July 20, 1878	1.60	---	645.30	62
Hills Ditch No. 5	Kerber creek	Sept. 15, 1878	2.26	---	646.90	63

Shewalter Ditch, No. 1.....	San Luis creek.....	April 25, 1879.....	.70.....	649.16.....	64
Shewalter Ditch, No. 2.....	San Luis creek.....	April 25, 1879.....	.80.....	649.86.....	64
Ross Ditch.....	San Luis creek.....	June 5, 1879.....	4.70.....	650.66.....	65
Briley Ditch.....	Kerber creek.....	Oct. 1, 1879.....	1.20.....	655.36.....	66
Wales and Shellabarger Ditch, No. 2, second extension.....	Rito Alto creek.....	Oct. 1, 1879.....	6.40.....	656.56.....	65
Gash Ditch.....	North Crestone creek.....	Feb. 28, 1880.....	.60.....	662.96.....	67
Hopkins Ditch.....	North Crestone creek.....	April 1, 1880.....	.12.....	663.56.....	68
Wales San Luis Ditch, No. 1, second extension.....	San Luis creek.....	April 1, 1880.....	2.00.....	663.68.....	68
Silver Creek Ditch.....	Silver creek.....	April 15, 1880.....	2.00.....	665.68.....	69
Neeland Ditch.....	Neeland creek.....	May 1, 1880.....	2.40.....	667.68.....	70
Shellabarger Ditch, No. 2.....	Rito Alto creek.....	May 1, 1880.....	4.80.....	670.08.....	70
Means Ditch, No. 1.....	Alder creek.....	May 1, 1880.....	.70.....	674.88.....	70
Stump Ditch, No. 1.....	Clover creek.....	May 1, 1880.....	.50.....	675.58.....	70
Stump Ditch, No. 2.....	Clover creek.....	May 15, 1880.....	.12.....	676.08.....	71
Stump Ditch, No. 3.....	Clover creek.....	May 15, 1880.....	.20.....	676.20.....	71
Squires Ditch, No. 2.....	{ San Luis-Hot Springs } creek.....	May 15, 1880.....	.80.....	676.40.....	71
Allen Ditch.....	Crestone creek.....	July 1, 1880.....	1.60.....	677.20.....	72
Means Ditch, No. 2.....	San Luis creek.....	July 1, 1880.....	.30.....	678.80.....	72
Schultze-Dittrich Ditch, second extension.....	San Luis creek.....	July 15, 1880.....	3.00.....	679.10.....	73
Hall Ditch, No. 1, first extension.....	Kerber creek.....	April 5, 1881.....	2.00.....	682.10.....	74
McFarland Ditch, "A" and "B".....	{ Eagle Brook and Int- } terfly creeks.....	April 15, 1881.....	6.80.....	684.10.....	75
Barsch Ditch, No. 1.....	Brook creek.....	April 15, 1881.....	1.60.....	690.90.....	75

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	Order of priority in district.
Robinson Ditch.....	Spring creek.....	April 15, 1881	1.80	.....	692.50	75
Robinson & Reese Ditch.....	Spring creek.....	April 15, 1881	2.20	.....	694.30	75
Robinson & Reese Irrigating Ditch.....	Raspberry creek.....	April 15, 1881	All water in Raspberry c'k.	.....	.....	75
Davison Ditch No. 3.....	Spring creek.....	May 1, 1881	.16	.....	696.50	76
Henry White Ditch.....	Kerber creek.....	May 1, 1881	1.00	.....	696.66	76
Clark Ditch, "A".....	Rock creek.....	May 1, 1881	4.00	.....	697.66	76
Turner Ditch.....	Kerber creek.....	May 10, 1881	1.20	.....	701.66	77
Richard Ditch No. 1.....	West Spring creek.....	May 15, 1881	1.20	.....	702.86	78
Ridenour Ditch.....	Spring near Garner c'k.....	June 1, 1881	.60	.....	704.06	79
Davison Ditch No. 2.....	Spring creek.....	July 1, 1881	.60	.....	704.66	80
Wells-Kerber Ditch, second extension.....	Kerber creek.....	April 1, 1882	4.00	8.20	705.26	81
Hall Ditch No. 1, second extension.....	Kerber creek.....	April 5, 1882	2.40	9.70	709.26	82
Barbary Tobler Ditch.....	Cedar creek.....	April 12, 1882	.80	.....	711.66	83
Baca Grant No. 4 Irrigating Ditch No. 12, third extension.....	Crestone creek.....	May 10, 1882	3.20	34.60	712.46	84
Kennedy ditch No. 3.....	San Luis creek.....	May 15, 1882	1.00	.....	715.66	85

George C. Travis Ditch	Cedar creek	June 1, 1882	.08	716.66	86
Richard Ditch No. 2	East Spring creek	June 1, 1882	.24	716.74	86
Clayton Ditch "G"	Kerber creek	Aug. 13, 1882	2.00	716.98	87
De Camp Ditch	San Luis creek	May 1, 1883	.60	718.98	88
Kaufman Ditch	Kelly creek	May 10, 1883	2.00	719.58	89
Baca Grant No. 4, Irrigating Ditch No. 12, fourth extension	Crestone creek	May 10, 1883	3.20	721.58	89
The White Ditch	Little Kerber creek	June 1, 1883	.40	724.78	90
Baca Grant No. 4, Irrigating Ditch No. 5, first extension	North Crestone creek	June 1, 1883	2.60	725.18	90
Wales & Travis Ditch, second extension	Rito Alto creek	June 1, 1883	7.50	727.78	90
Davison Ditch No. 1	Spring creek	Aug. 15, 1883	.80	735.28	91
Baca Grant No. 4, Irrigating Ditch No. 12, fifth extension	Crestone creek	Nov. 15, 1883	6.40	736.08	92
Charles Ditch	North Crestone creek	Jan. 1, 1884	.40	742.48	93
Wells-Kerber Ditch, third extension	Kerber creek	Feb. 22, 1884	.80	742.88	94
Hills Ditch No. 5, first extension	Kerber creek	Feb. 22, 1884	1.00	743.68	94
Peterson Ditch No. 1, third extension	Wild Cherry creek	Feb. 23, 1884	4.70	744.68	95
Malcolm Ditch	Alder creek	April 15, 1884	.70	749.38	96
Barsch Ditch No. 2	Brook creek	April 15, 1884	1.60	750.08	96
Barsch Ditch No. 3	Brook creek	April 15, 1884	1.60	751.68	96
Daniels & Fish Arroya Ditch, first extension	Kerber creek	April 15, 1884	2.80	753.28	96
Nash Ditch	San Isabel creek	April 20, 1884	1.50	756.08	97
Wales & Shellabarger Ditch No. 2, third extension	Rito Alto creek	May 15, 1884	12.00	757.58	98
H. C. Ridenour Ditch No. 1	Spring near Major creek	May 25, 1884	1.30	769.58	99

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority	Summation of decrees to each ditch or canal.	Cubic feet of water appropriated in district.	Order of priority in district.
John De Camp Ditch, "B"	San Luis creek	June 1, 1884	.60	.....	770.88	100
The Ewing Ditch	San Isabel creek	June 1, 1884	1.90	.....	771.48	100
Clark Ditch, "B"	Yankee creek	June 15, 1884	.....	all water in Yankee crk	773.38	101
Clayton Ditch, "C"	Kelly creek	June 15, 1884	3.60	.....	773.38	101
H. H. Wales Ditch, first extension	Rito Alto creek	Dec. 20, 1884	1.60	2.40	776.98	102
Stump Ditch No. 4	Clover creek	April 1, 1885	.20	.....	778.58	103
Clark Ditch, "A," first extension	Rock creek	May 1, 1885	3.20	7.20	778.78	104
Sapp & Braley Ditch	San Luis creek	May 5, 1885	2.80	.....	781.98	105
Stump Ditch	Clover creek	May 10, 1885	.20	.....	784.78	106
Prairie Dog Ditch	Spring creek	May 15, 1885	.60	.....	784.98	107
Norris Ditch	Kerber creek	April 15, 1886	.70	.....	785.58	109
Reese Irrigating Ditch	Spring creek	May 1, 1886	2.40	.....	786.28	110
Braley Ditch	San Luis creek	May 9, 1886	1.40	.....	788.68	111
Sapp & Braley Ditch, first extension	San Luis creek	May 15, 1886	.80	3.60	790.08	112

The Sanford Ditch, first extension	Rito Alto creek	June 1, 1886	1.80	4.20	790.88	113
San Isabel Ditch, fourth extension	San Isabel creek	June 1, 1886	3.20	14.90	792.68	113
Jordon Ditch No. 2	Kerber creek	April 28, 1887	.80	-----	795.88	114
Wales & Travis Ditch, third extension	Rito Alto creek	May 1, 1887	4.46	18.86	796.68	115
Jordon Ditch No. 1	Kelly creek	May 12, 1887	2.80	-----	801.14	116
Wales & Shellabarger Ditch No. 2, fourth extension	Rito Alto creek	May 31, 1887	6.80	36.00	803.94	117
Alder Creek Ditch	Alder creek	June 4, 1887	1.50	-----	810.74	118
Norris Ditch, first extension	Kerber creek	Aug. 1, 1887	2.00	2.70	812.24	119
Wales Ditch No. 3, first extension	Rito Alto creek	Aug. 1, 1887	1.50	5.50	814.24	120
North Ditch No. 3, third extension	San Isabel creek	Sept. 1, 1887	2.60	8.90	815.74	121
H. C. Ridenour Ditch No. 2	Major creek	April 1, 1888	1.30	-----	818.34	122
Shellabarger & Eaton Ditch, first extension	Rito Alto creek	April 15, 1888	2.80	3.30	819.64	123
Frazee Ditch	San Isabel creek	May 1, 1888	4.00	-----	822.44	124
Dorcey Ditch No. 1	Carpenter creek	May 15, 1888	.40	-----	826.44	125
Dorcey Ditch No. 2	Carpenter creek	May 15, 1888	.40	-----	826.84	125
Dorcey Ditch No. 3	Carpenter creek	May 15, 1888	.44	-----	827.24	125
Swidensky Ditch	Gooseberry creek	May 15, 1888	.60	-----	827.68	125
Baca Grant No. 4, Irrigating Ditch No. 9, first extension	Crestone creek	June 1, 1888	19.00	39.00	828.28	126
Cody Ditch	Kerber creek	June 20, 1888	.30	-----	847.28	127
Nash Ditch, first extension	San Isabel creek	June 23, 1888	3.50	5.00	847.58	128
Baca Grant No. 4, Irrigating Ditch No. 10, first extension	Crestone creek	July 1, 1888	17.00	39.40	851.08	129

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
Hall Ditch No. 2.	San Luis creek.	Oct. 1, 1888	1.60	-----	868.68	130
Carver Ditch.	Major creek.	Mar. 28, 1889	1.50	-----	869.68	131
Baca Grant No. 4, Irrigating Ditch No. 24, first extension.	Deadman creek.	June 1, 1889	29.00	39.00	871.18	132
Baca Grant No. 4, Irrigating Ditch No. 26, first extension.	Deadman creek.	June 15, 1889	14.80	20.80	900.18	133
	-----	-----	-----	-----	914.98	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 25, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, JOSEPH C. BRALEY, VILLA GROVE, COLO. APPOINTED 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The High Line Ditch	Black Canon creek	Jan. 8, 1891	Jan. 5, 1891	41.02	L. H. Weisbrod
The Extension of Hoffman's Ditch No. 1	Cotton creek	May 21, 1891	Claimed for } priorities } Nos. 12-217	10.58	Emil Tabler
The Extension of Hoffman's Ditch No. 2	Cotton creek	May 21, 1891		10.58	Emil Tabler
The Valdez Ditch	Cotton creek	June 16, 1891	May 7, 1890	4.20	Jose Valdez
The Casias Ditch	Cotton creek	June 16, 1891	July 8, 1890	3.27	Mrs. M. Casias
The Candelaria Ditch	Cotton creek	June 16, 1891	May 1888	3.33	Mannel S. Candelaria
The Dimmick Gulch Ditch	S. San Isabel creek	July 28, 1891	June 11, 1891	29.25	H. Nash
The Bennett Ditch	Cotton creek	July 29, 1891	June 15, 1886	3.80	James W. Bennett
The Cope Ditch No. 2	Cotton creek	Aug. 11, 1891	June 1890	6.25	F. L. Cope
The Schopp Bros. Ditch No. 1	Horn creek	Sept. 10, 1891	May 15, 1884	1.33	A. Schopp & Co.
The Schopp Bros. Ditch No. 2	Warrick creek	Sept. 10, 1891	Sept. 1, 1884	2.00	A. Schopp & Co.
The Sapp Ditch, "A"	Stream and springs	Jan. 11, 1892	Spring 1888	Not given	James M. Sapp
The Sapp Ditch "B"	Stream and springs	Jan. 11, 1892	Spring 1888	Not given	James M. Sapp
The Collins Ditch	Springs	Jan. 23, 1892	Oct. 1891	14.00	Alfred Collins

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Nash's Home Ditch.....	San Isabel creek..	Feb. 29, 1892	June 9, 1891	3.60	Harrison Nash
The Arena Ditch.....	Sand creek.....	Sept. 19, 1892	Sep. 12, 1892	80.00	The Medano Land & Cattle Company
The Warrouts Ditch.....	Cotton creek.....	Oct. 6, 1892	Spring 1888	3.20	L. A. Warrouts
The Cotton Creek Ditch.....	Cotton creek.....	Oct. 6, 1892	April 1892	82.20	The Cotton Creek Ditch Company
The Hammond Ditch, } amended statement. }	Medano creek.....	Nov. 7, 1892	Nov. 9, 1889	143.22	Francis Hammond <i>et al.</i>

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 26, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF COURT IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE AS FURNISHED BY THE CLERK OF THE COURT.—COMMISSIONER, RILEY M. EDWARDS, SAGUACHE, COLORADO. APPOINTED, 1889.

NAME OF DITCH.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch.	Cubic feet per second previously appropriated in district.	Order of priority in district.
Malone-Sullivan Ditch No. 1.....	Saguache creek	Apr. 1, 1866	5.20	—	—	1
Heimberger Ditch No. 1	Saguache creek	Apr. 15, 1866	.30	—	5.20	2
Heimberger Ditch No. 2	Saguache creek	Apr. 15, 1866	.80	—	5.50	2
Cato Ditch	Saguache creek	Apr. 15, 1866	.42	—	6.30	2
Hazard Ditch No. 1	Saguache creek	Apr. 30, 1866	.20	—	6.72	3
Hazard Ditch No. 2	Saguache creek	Apr. 30, 1866	—	—	—	3
Malone Ditch.	Saguache creek	May 15, 1866	2.40	—	6.92	4
Lawrence Arroya Ditch	Saguache creek	Mar. 7, 1867	9.20	—	9.32	5
Malone-Sullivan Ditch No. 2	Saguache creek	Apr. 1, 1867	1.56	—	18.52	6
Laengen-Sullivan Ditch	Saguache creek	May 1, 1867	3.70	—	20.08	7
Gothell Ditch No. 1	Saguache creek	May 1, 1867	8.80	—	23.78	7

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water decreed to each priority.	Summation of decrees to each ditch.	Cubic feet per second previously appropriated in district.	Order of priority in district.
Russell Ditch, No. 4.....	Saguache creek.....	May 23, 1867.....	5.60.....	.....	32.58.....	8
Ashley and Profit Ditch.....	Saguache creek.....	April 1, 1868.....	8.20.....	.....	38.18.....	9
Profit Company Ditch.....	Saguache creek.....	April 15, 1868.....	1.20.....	.....	46.38.....	10
Fullerton Ditch, No. 1.....	Saguache creek.....	May 1, 1868.....	6.00.....	.....	47.58.....	11
Stubbs & Gallago Ditch.....	Saguache creek.....	April 15, 1869.....	7.00.....	.....	53.58.....	12
Chaves' Lateral Ditch.....	Saguache creek.....	May 1, 1869.....	4.40.....	.....	60.58.....	13
Russell Company Ditch.....	Saguache creek.....	May 1, 1869.....	6.20.....	.....	64.98.....	13
Spencer Ditch.....	Saguache creek.....	April 1, 1870.....	6.20.....	.....	71.18.....	14
Ford Ditch.....	Saguache creek.....	April 15, 1870.....	3.40.....	.....	77.38.....	15
Mears Ditch, No. 5.....	Saguache creek.....	April 15, 1870.....	1.00.....	.....	80.78.....	15
Mears Ditch, No. 4.....	Saguache creek.....	May 1, 1870.....	2.00.....	.....	81.78.....	16
Profit Company Ditch, first extension.....	Saguache creek.....	May 14, 1870.....	2.40.....	3.60.....	83.78.....	17
Ward Highline Ditch.....	Saguache creek.....	April 15, 1871.....	3.70.....	.....	86.18.....	18
Ford Ditch, first extension.....	Saguache creek.....	April 15, 1871.....	5.00.....	8.40.....	89.88.....	18
Mountfield Ditch.....	Saguache creek.....	April 20, 1871.....	2.90.....	.....	94.88.....	19

Brau Bros. Ditch No. 1.....	Saguache creek.....	April 25, 1871.....	4.00.....	97.78.....	19
Brau Bros. Ditch No. 2.....	Saguache creek.....	April 25, 1871.....	2.00.....	101.78.....	19
Gothelf Ditch No. 3.....	Saguache creek.....	May 1, 1871.....	3.20.....	103.78.....	20
Gothelf Ditch No. 4.....	Saguache creek.....	May 1, 1871.....	.30.....	106.98.....	20
Manchego Ditch.....	Saguache creek.....	May 1, 1871.....	2.20.....	107.28.....	20
Hodding Ditch No. 3.....	Hodding creek.....	May 10, 1871.....	.20.....	109.48.....	21
Hodding Ditch No. 4.....	Saguache creek.....	July 2, 1871.....	1.20.....	109.68.....	22
Wall Ditch.....	Saguache creek.....	Aug. 1, 1871.....	11.90.....	110.88.....	23
Proffit-McDonough Ditch.....	Saguache creek.....	Sept. 1, 1871.....	2.20.....	122.78.....	24
Jeep & Scandrett Ditch.....	Saguache creek.....	April 1, 1872.....	4.00.....	124.98.....	25
Taylor & Ashley Ditch.....	Saguache creek.....	April 1, 1872.....	4.60.....	128.98.....	25
Morrison Ditch.....	Saguache creek.....	April 15, 1872.....	2.50.....	133.58.....	26
Ford Ditch, second extension.....	Saguache creek.....	May 1, 1872.....	4.00.....	136.08.....	27
Moses Goff Ditch No. 1.....	Saguache creek.....	May 1, 1872.....	3.00.....	140.08.....	27
Moses Goff Ditch No. 2.....	Saguache creek.....	May 1, 1872.....	2.60.....	143.08.....	27
Moses Goff Ditch No. 3.....	Saguache creek.....	May 1, 1872.....	5.60.....	145.68.....	27
Garcia Ditch No. 1.....	Saguache creek.....	May 1, 1872.....	2.60.....	151.28.....	27
Van Allen Ditch.....	Saguache creek.....	May 1, 1872.....	1.20.....	153.88.....	27
Houglan Creek Ditch.....	Houglan Creek.....	May 10, 1872.....	.40.....	155.08.....	28
Proffit Company Ditch, second extension.....	Saguache creek.....	May 14, 1872.....	2.40.....	155.48.....	29
Muuro Ditch No. 1.....	Saguache creek.....	May 15, 1872.....	2.50.....	157.88.....	30
Slane & Scandrett Ditch.....	Saguache creek.....	June 1, 1872.....	2.40.....	160.38.....	31

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in district.	Order of priority in district.
Nehls Co. Ditch	Saguache creek	July 1, 1872	1.40	—	162.78	32
Roberts Co. Ditch	Saguache creek	July 1, 1872	4.50	—	164.18	32
Hartman Bros. Ditch No. 2	Saguache creek	Jan. 1, 1873	3.80	—	168.98	33
Mill Ditch	Saguache creek	Jan. 15, 1873	1.00	—	172.78	34
Seitz, McClure & Ashley Ditch	Saguache creek	April 15, 1873	4.60	—	173.78	35
Hawkins Ditch	Saguache creek	May 1, 1873	4.00	—	178.38	36
George Ball Ditch	Saguache creek	May 1, 1873	3.00	—	182.38	36
Gothelf-Somora Ditch	Saguache creek	May 1, 1873	1.50	—	185.38	36
Jones' Ditch	Saguache creek	May 20, 1873	.38	—	186.88	37
Munro Ditch No. 2	Saguache creek	Nov. 1, 1873	2.18	—	187.26	38
Hartman Bros. Ditch No. 3	Saguache creek	Nov. 1, 1873	3.20	—	189.44	38
Houglund Ditch	Saguache creek	Nov. 2, 1873	3.40	—	192.64	39
Hartman Bros. Ditch No. 4	Saguache creek	Mar. 1, 1874	8.48	—	196.04	40
Ellis & Lamb Ditch	Saguache creek	Mar 15, 1874	2.80	—	204.52	41
Russell Ditch	Saguache creek	April 1, 1874	5.20	—	207.32	42

Jaques Ditch.....	Saguache creek.....	Apr. 2, 1874	1.80	212.52	43
Turnbull & Luengen Ditch.....	Saguache creek.....	Apr. 15, 1874	1.80	214.32	44
Hern Ditch.....	Saguache creek.....	Apr. 15, 1874	1.00	216.12	44
Carruthers Ditch.....	Saguache creek.....	May 1, 1874	1.00	217.12	45
Russell Ditch No. 2.....	Saguache creek.....	May 1, 1874	3.00	218.12	45
North Stubbs Irrigating Ditch No. 2.....	Saguache creek.....	May 10, 1874	1.04	221.12	46
Hartman Bros. Ditch No. 3, first extension.....	Saguache creek.....	June 1, 1874	1.60	222.16	47
Hodding Ditch No. 2.....	Hodding creek.....	June 10, 1874	.30	223.76	48
Piquet Ditch No. 7.....	Middle creek.....	June 10, 1874	1.60	224.06	48
Campbell Ditch No. 1.....	Saguache creek.....	Sept. 1, 1874	4.00	225.66	49
Campbell Ditch No. 4.....	Saguache creek.....	Sept. 1, 1874	2.50	229.66	49
Monk Ditch No. 1.....	Saguache creek.....	Apr. 1, 1875	8.40	232.16	50
Campbell Ditch No. 6.....	Saguache creek.....	Apr. 1, 1875	6.10	240.56	50
Hartman Bros. Ditch No. 1.....	Saguache creek.....	Apr. 1, 1875	3.20	246.66	50
Hartman Bros. Ditch No. 2, first extension.....	Saguache creek.....	Apr. 1, 1875	1.80	249.86	50
Irwin Ditch.....	Saguache creek.....	Apr. 10, 1875	9.60	251.66	51
Werner Ditch, "A".....	Saguache creek.....	Apr. 15, 1875	2.00	261.26	52
Downer Ditch No. 1.....	Saguache creek.....	Apr. 20, 1875	2.80	263.26	53
Piquet Ditch No. 6.....	Middle creek.....	Apr. 25, 1875	1.20	266.66	54
Leanders Ditch No. 1.....	Leanders creek.....	May 1, 1875	1.00	267.26	55
Nehls Company Ditch, first extension.....	Saguache creek.....	May 1, 1875	9.52	268.26	55
Mears Ditch No. 1.....	Saguache creek.....	May 1, 1875	1.30	277.78	55

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH.	Name of stream from which water is taken.	Date of appropriation	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Mears Ditch No. 2	Saguache creek	May 1, 1875	1.50	—	279.08	55
Garcia Ditch No. 2	Saguache creek	May 1, 1875	1.40	—	280.58	55
Hodding Ditch No. 5.	Saguache creek	May 5, 1875	1.50	—	281.98	56
Piquet Ditch No. 1.	Middle creek	June 1, 1875	1.60	—	283.48	57
John Shore Ditch	Saguache creek	June 15, 1875	3.20	—	285.08	58
Hartman Bros. Ditch No. 3, second extension	Saguache creek	July 1, 1875	2.40	7.20	288.28	59
Hautman Bros. Ditch No. 4, first extension	Saguache creek	Aug. 1, 1875	1.60	10.08	290.68	60
John Slane Arroya Ditch	Saguache creek	Aug. 4, 1875	2.76	—	292.28	61
Middle Ditch	Saguache creek	Aug. 31, 1875	1.60	—	295.04	62
Piquet Ditch No. 3.	Middle creek	Mar. 20, 1876	.80	—	296.64	63
North Ditch	Saguache creek	April 10, 1876	3.20	—	297.44	64
Ashley & Means' Ditch	Saguache creek	April 10, 1876	3.20	—	300.64	64
O'Bergfeld & Werner No. 1, O'Bergfeld & Werner No. 2, and Gow & Dick Ditches, merged	Saguache creek	April 15, 1876	5.60	—	303.84	65
Coleman South Ditch	Saguache creek	April 15, 1876	2.40	—	309.44	65

Campbell Ditch, No. 5	May 1, 1876	1.56	---	311.84	66
John Shore Ditch, first extension	June 1, 1876	1.00	4.20	313.40	67
William Stowe Ditch	June 1, 1876	1.08	---	314.40	67
Hartman Bros. Ditch, No. 3, third extension	Aug. 1, 1876	.80	8.00	315.48	68
Hartman Bros. Ditch, No. 4, second extension	Aug. 1, 1876	1.92	12.00	316.28	68
Campbell Ditch No. 2	Aug. 1, 1876	1.90	---	318.20	68
Shore Ditch	Aug. 1, 1876	6.00	---	320.10	68
Hodgson Ditch No. 1	Nov. 1, 1876	1.60	---	326.10	69
Turnbull & Luengren Ditch, first extension	April 1, 1877	3.60	5.40	327.70	70
Piquet Ditch No. 2	April 1, 1877	1.60	---	331.30	70
Piquet Ditch No. 5	April 1, 1877	.80	---	332.90	70
Piquet Ditch No. 4	April 20, 1877	1.00	---	333.70	71
Jones & Benjamin Ditch No. 1	May 1, 1877	2.40	---	334.70	72
Hartman Bros. Ditch No. 2, second extension	May 1, 1877	7.20	12.80	337.10	72
Hartman Bros. Ditch No. 4, third extension	May 1, 1877	2.40	14.40	344.30	72
John Shore Ditch, second extension	May 1, 1877	.80	5.00	346.70	72
John Shane Ditch	June 1, 1877	1.40	---	347.50	73
Schaller Ditch No. 1	June 1, 1877	1.00	---	348.90	73
Schaller Ditch No. 2	June 1, 1877	1.00	---	349.90	73
Jones & Benjamin Ditch No. 2	June 1, 1877	.50	---	350.90	73
Sullivan Ditch	June 1, 1877	4.80	---	351.40	73
William Stowe Ditch, first extension	June 15, 1877	2.12	3.20	356.20	74

STATEMENT CONCERNING DITCHES.—Continued.

NANE OF DITCH	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Piquet Ditch No. 10.	Ford creek	April 15, 1878	1.40	-----	358.32	75
Campbell Ditch No. 7.	Saguache creek	May 1, 1878	4.80	-----	359.72	76
Mears Ditch No. 3.	Saguache creek	May 1, 1878	.40	-----	364.52	76
Fullerton Ditch No. 2.	Saguache creek	May 1, 1878	1.80	-----	364.92	76
Laughlin Ditch	Saguache creek	May 10, 1878	.90	-----	366.72	77
Piquet Ditch No. 9.	Ford creek	Sept. 1, 1878	1.00	-----	367.62	78
Downer Ditch	Saguache creek	April 30, 1879	1.60	-----	368.62	79
Seitz & Benjamin Ditch	Saguache creek	May 15, 1879	1.20	-----	370.22	80
Lenders Ditch No. 2.	Lenders creek	June 1, 1879	1.20	-----	371.42	81
Chase & Peyton Ditch.	Saguache creek	June 1, 1879	5.60	-----	372.62	81
Farrington Ditch No. 1.	Saguache creek	June 1, 1879	1.40	-----	378.22	81
William Stowe Ditch, second extension	Sugaache creek	June 1, 1879	3.20	6.40	379.62	81
Hartman Bros. Ditch No. 4, fourth extension	Saguache creek	July 1, 1879	6.40	20.80	382.82	82
Piquet Ditch No. 14.	Skelton creek	Sept. 20, 1879	1.00	-----	386.22	83
Piquet Ditch No. 13.	Skelton creek	Oct. 1, 1879	1.30	-----	390.22	84

Piquet Ditch, No. 16.....	Skelton creek.....	Oct. 10, 1879.....	.40.....	391.52.....	85.....
Piquet Ditch, No. 17.....	Skelton creek.....	Oct. 20, 1879.....	1.40.....	391.92.....	86.....
Piquet Ditch, No. 18.....	Skelton creek.....	Oct. 21, 1879.....	.10.....	393.32.....	87.....
Piquet Ditch, No. 19.....	Skelton creek.....	Oct. 30, 1879.....	.70.....	393.42.....	88.....
Piquet Ditch, No. 20.....	Skelton creek.....	Nov. 5, 1879.....	.60.....	394.12.....	89.....
Osgood Ditch.....	Saguache creek.....	April 1, 1880.....	3.00.....	394.72.....	90.....
Laughlin Ditch, first extension.....	Saguache creek.....	May 1, 1880.....	1.00.....	397.72.....	91.....
McCree Ditch.....	Saguache creek.....	May 1, 1880.....	2.00.....	398.72.....	91.....
Lneugen Ditch.....	Saguache creek.....	May 1, 1880.....	9.60.....	400.72.....	91.....
Marshall & Arter Ditch.....	Saguache creek.....	June 1, 1880.....	2.20.....	410.32.....	92.....
Elwes Ditch, No. 1.....	Saguache creek.....	June 1, 1880.....	1.40.....	412.52.....	92.....
Elwes Ditch, No. 2.....	Saguache creek.....	June 1, 1880.....	1.00.....	413.92.....	92.....
Hartman Brothers Ditch, No. 4, fifth extension.....	Sagurche creek.....	Aug. 15, 1880.....	3.20.....	414.92.....	93.....
Monk Ditch, No. 3.....	Saguache creek.....	April 1, 1881.....	2.50.....	418.12.....	94.....
Russell Ditch, No. 3.....	Saguache creek.....	May 1, 1881.....	.34.....	420.62.....	95.....
Monteith Ditch.....	Saguache creek.....	May 15, 1881.....	2.80.....	420.96.....	96.....
Hayes-Monteith Ditch.....	Saguache creek.....	May 15, 1881.....	.80.....	423.76.....	96.....
Redmond-Monteith Ditch.....	Saguache creek.....	May 15, 1881.....	2.40.....	424.56.....	96.....
Elwes Ditch, No. 3.....	Saguache creek.....	June 1, 1881.....	1.20.....	426.96.....	97.....
Hartman Brothers' Ditch, No. 1, first extension.....	Saguache creek.....	June 1, 1881.....	1.60.....	428.16.....	97.....
Piquet Ditch, No. 15.....	Skelton creek.....	Oct. 20, 1881.....	.50.....	429.76.....	98.....
Monk Ditch, No. 2.....	Saguache creek.....	April 1, 1882.....	1.50.....	430.26.....	99.....

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Jepp Ditch.....	Hunts Spring creek.....	April 15, 1882.....	2.40.....	-----	431.76.....	100.....
Piquet Ditch No. 22.....	Middle creek.....	April 15, 1882.....	.50.....	-----	434.16.....	100.....
Piquet Ditch No. 23.....	Middle creek.....	April 15, 1882.....	.10.....	-----	434.66.....	100.....
George Ball Ditch, first extension.....	Saguache creek.....	May 1, 1882.....	3.00.....	6.00.....	434.76.....	101.....
Sullivan Ditch, first extension.....	Saguache creek.....	July 1, 1882.....	2.40.....	7.20.....	437.76.....	102.....
Hodgson Ditch No. 2.....	Saguache creek.....	May 1, 1883.....	1.20.....	-----	440.16.....	103.....
Holcomb Ditch.....	Saguache creek.....	May 1, 1883.....	4.80.....	-----	441.36.....	103.....
Lawrence Ditch No. 2.....	Saguache creek.....	May 7, 1883.....	4.40.....	-----	446.16.....	104.....
Lawrence Ditch No. 3.....	Saguache creek.....	May 7, 1883.....	2.40.....	-----	450.56.....	104.....
Piquet Ditch No. 12.....	Ford creek.....	May 25, 1883.....	.70.....	-----	552.96.....	105.....
Piquet Ditch No. 21.....	Saguache creek.....	May 25, 1883.....	.70.....	-----	453.66.....	105.....
Piquet Ditch No. 8.....	Middle creek.....	May 28, 1882.....	.80.....	-----	454.36.....	106.....
Arroya Ditch.....	Saguache creek.....	June 1, 1883.....	9.20.....	-----	455.16.....	107.....
Piquet Ditch No. 11.....	Ford creek.....	June 1, 1883.....	.40.....	-----	464.36.....	107.....

Goodwin Ditch	Saguache creek	June 1, 1883	1.60	464.76	107
Travis Ditch	Saguache creek	Dec. 25, 1883	16.00	466.36	108
Travis Ditch No. 2	Saguache creek	Dec. 25, 1883	4.00	482.36	108
Travis Ditch No. 3	Saguache creek	Dec. 25, 1883	5.00	486.36	108
Extension Goodaker Ditch	Saguache creek	April 1, 1884	1.00	491.36	109
Freise Ditch No. 1	Saguache creek	April 20, 1884	2.00	492.36	110
David Downer Ditch	Saguache creek	April 30, 1884	.30	494.36	111
Marshall & Arter Ditch, first extension	Saguache creek	May 1, 1884	1.40	494.66	112
Goodwin Ditch, first extension	Saguache creek	June 1, 1884	7.40	496.06	113
Ford Creek Ditch No. 1	Ford creek	June 15, 1884	.50	503.46	114
Tuttle Creek Ditch No. 2	Tuttle creek	June 15, 1884	.30	503.96	114
Baxter Creek Ditch No. 3	Baxter creek	June 15, 1884	.20	504.26	114
Sleep Creek Ditch	Sleep creek	July 10, 1884	3.20	504.46	115
Kirkendall & Rambo Ditch	Saguache creek	May 1, 1885	1.60	507.66	116
Holcomb Ditch, first extension	Saguache creek	May 1, 1885	5.20	509.26	116
Harene Ditch No. 1	Mill creek	April 1, 1886	2.00	514.46	117
Harene Ditch No. 2	Mill creek	April 1, 1886	2.00	516.46	117
Harene Ditch No. 3	Mill creek	April 1, 1886	2.00	518.46	117
Turnbull & Luengen Ditch, second extension	Saguache creek	April 1, 1886	5.00	520.46	117
Carter Ditch No. 4	Saguache creek	May 1, 1886	.80	525.46	118
Bulen Ditch No. 1	Saguache creek	May 10, 1886	2.40	526.26	119

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
Bulen Ditch No. 2	Saguache creek	June 1, 1886	.50	.....	528.66	120
Phillips Ditch No. 1	Saguache creek	Feb. 16, 1887	2.40	.....	529.16	121
Phillips Ditch No. 2	Saguache creek	Mar. 6, 1887	.40	.....	531.56	122
Kirkendall Ditch No. 2	Saguache creek	Mar. 15, 1887	.80	.....	531.96	123
Fry Ditch	Saguache creek	Mar. 22, 1887	1.00	.....	532.76	124
North Houghland Ditch	Saguache creek	Apr. 15, 1887	.50	.....	533.76	125
Union Ditch	Saguache creek	Apr. 15, 1887	.50	.....	534.26	125
Ziegler Ditch	Saguache creek	May 1, 1887	10.00	.....	534.76	126
Commodore Ditch	Saguache creek	May 1, 1887	3.60	.....	544.76	126
Jays Ditch	Saguache creek	May 5, 1887	1.00	.....	548.36	127
Friese Ditch No. 2	Saguache creek	June 11, 1887	1.00	.....	549.36	128
Uddell & Means Ditch	Saguache creek	June 15, 1887	2.00	.....	550.36	129
Hodding Ditch No. 1	Hodding creek	July 1, 1887	.70	.....	552.36	130
Miely Ditch	Saguache creek	Mar. 1, 1888	4.50	.....	553.06	131

Sheek Ditch	Saguache creek	Mar. 26, 1888	1.20	-----	557.56	132
Jays Ditch, first extension	Saguache creek	May 11, 1888	.80	1.80	558.76	133
Connard Ditch	Saguache creek	July 1, 1888	.40	-----	559.56	134
Farrington Ditch No. 2	Saguache creek	July 10, 1888	.40	-----	559.96*	135
Scitz, McClure & Ashley Ditch, first extension	Saguache creek	Oct. 25, 1888	1.40	6.00	560.36	136
					561.76	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 27, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF THE COURT IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE, AS FURNISHED BY CLERK OF THE COURT—COMMISSIONER, MARK BIEDELL, LA GARITA, COLO. APPOINTED 1889

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
La Loma Ditch.....	Carnero creek.....	April 1, 1870	.26	-----	-----	1 A
Madre Ditch.....	Carnero creek.....	April 1870	2.21	-----	.26	2 A
Angostura Ditch.....	Carnero creek.....	April 1870	1.04	-----	2.47	3 A
La Isla Ditch.....	Carnero creek.....	May 1, 1870	1.30	-----	3.51	4 A
La Vega Ditch.....	Carnero creek.....	June 1, 1870	.52	-----	4.81	5 A
Wilson Ditch No. 1.....	Carnero creek.....	April 1, 1871	.52	-----	5.33	6 A
Wilson Ditch No. 2.....	Carnero creek.....	April 1, 1871	.52	-----	5.85	7 A
Wilson Ditch No. 3.....	Carnero creek.....	April 1, 1871	.52	-----	6.37	8 A
La Magoties Ditch.....	Carnero creek.....	June 1, 1871	1.82	-----	6.89	9 A
Beaver Ditch.....	Carnero creek.....	April 1872	1.30	-----	8.71	10 A
Wilson Ditch No. 4.....	Carnero creek.....	Aug. 1872	2.60	-----	10.01	11 A

	Oct.	1872	.65	-----	12 A
Carnero creek	May	1, 1874	.39	-----	13 A
Carnero creek	Aug.	1, 1878	1.56	-----	14 A
Carnero creek	Oct.	1, 1878	.78	-----	15 A
Carnero creek	Oct.	1, 1878	1.04	-----	16 A
Carnero creek	May	1, 1879	.39	-----	17 A
Carnero creek	May	1, 1879	.39	-----	18 A
Carnero creek	May	1, 1879	.78	-----	19 A
Carnero creek	June	1, 1879	.65	-----	20 A
Carnero creek	July	1, 1879	.65	-----	21 A
Carnero creek	April	1, 1880	.52	-----	22 A
La Garita creek	May	1, 1870	1.95	-----	1 B
La Garita creek	April	1, 1871	1.30	-----	2 B
La Garita creek	May	1, 1871	.78	-----	3 B
La Garita creek	April	1, 1872	.65	-----	4 B
La Garita creek	Spring	1872	.65	-----	5 B
La Garita creek	May	1, 1872	1.04	-----	6 B
La Garita creek	June	1, 1873	.78	-----	7 B
La Garita creek	June	1, 1873	.40	-----	8 B
La Garita creek	June	1, 1873	.40	-----	9 B
La Garita creek	April	1, 1874	1.04	-----	10 B
Green Ditch No. 7					
Cerro Ditch					
Green Ditch No. 1					
Green Ditch No. 2					
Green Ditch No. 6					
Green Ditch No. 3					
Green Ditch No. 4					
Green Ditch No. 5					
Cassias Ditch					
Torrivio Ditch					
La Gata Ditch					
Biedell Ditch No. 10					
Wilson Ditch No. 1					
Biedell Ditch No. 2					
Prior Ditch					
Romero Ditch					
Biedell Ditch No. 1					
Mammel Ditch					
McLeod Ditch No. 1					
McLeod Ditch No. 2					
Niggar Ditch					

STATEMENT CONCERNING DITCHES—Concluded.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in District.
Middle Ditch.....	La Garita creek.....	June 1, 1874.....	.52.....	.....	8.99.....	11 B
Home Ditch No. 1.....	La Garita creek.....	Nov. 1874.....	1.30.....	.....	9.51.....	12 B
Garcia Ditch.....	La Garita creek.....	May 1875.....	.52.....	.....	10.51.....	13 B
Biedell Ditch No. 7.....	La Garita creek.....	May 1875.....	.78.....	.....	11.33.....	14 B
Du Bois Ditch.....	La Garita creek.....	June 1875.....	1.04.....	.....	12.11.....	15 B
Biedell Ditch No. 4.....	La Garita creek.....	May 1877.....	.78.....	.....	13.15.....	16
Stewart Ditch No. 4.....	La Garita creek.....	April 1878.....	1.04.....	.....	13.93.....	17
White Ditch No. 1.....	La Garita creek.....	May 1878.....	1.30.....	.....	14.97.....	18
McLeod Ditch No. 3.....	La Garita creek.....	1878.....	.65.....	.....	16.27.....	19
Curby Ditch No. 1.....	La Garita creek.....	Feb. 1879.....	.78.....	.....	16.92.....	20
Curby Ditch No. 2.....	La Garita creek.....	Feb. 1879.....	.78.....	.....	17.70.....	21
Curby Ditch No. 3.....	La Garita creek.....	1879.....	.78.....	.....	18.48.....	22
Curby Ditch No. 4.....	La Garita creek.....	Feb. 1880.....	1.04.....	.....	19.26.....	23
Curby Ditch No. 5.....	La Garita creek.....	Feb. 1880.....	1.04.....	.....	20.30.....	24

McLeod Ditch No. 4	La Garita creek	April 22, 188	1.56	21.34	25
McLeod Ditch No. 5	La Garita creek	May 1880	1.56	22.90	26
Schiffer Ditch	La Garita creek				27
Biedell (overflow) Ditch No. 11	La Garita creek				28
Biedell Home Ditch	La Garita creek		2.55	24.46	29
				27.01	

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 35, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—NO COMMISSIONER APPOINTED.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Beckwith-Martin Ditch.....	{ Sangre de Chris- to creek } U'te creek	Feb. 25, 1891	Not stated...	24 00	F. L. Beckwith <i>et al.</i>
The Sangre Ditch.....		June 26, 1891	May 6, 1890	24 00	F. L. Beckwith <i>et al.</i>
The McMullan Ditch.....		Aug. 12, 1891	Mar. 31, 1874	4 00	Charles McMullan

CHAPTER V.

IRRIGATION DIVISION NO. 4.

SAN JUAN DIVISION.

Superintendent, John P. Coston, Durango, Colorado.
Appointed June 26, 1890.

This Division comprises Water Districts Nos. 29, 30, 31, 32, 33 and 34.

No appointments of Water Commissioners have been made within this Division, except that of Alonzo P. Edmondson, of Mancos, for District No. 34, in 1890.

No reports have been received from the Superintendent for either 1891 or 1892.

The Commissioner for District No. 34 reports for the year 1892, forty-five ditches, with a total length of 103 miles, and carrying an average of 147.5 cubic feet of water per second for about seventy days.

Number of acres that can be irrigated therefrom.....	7,354
Number of acres of alfalfa irrigated.....	1,620
Number of acres of seeded grasses other than alfalfa irrigated.....	303
Number of acres of natural grasses irrigated.....	100
Number of acres of other crops irrigated.....	351
Number of acres irrigated by seepage.....	10
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Total acres irrigated.....	2,384

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 29, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Colton & Montroy Ditch.....	Mill creek.....	Dec. 8, 1890.....	Oct. 27, 1890.....	3.00.....	Colton & Montroy.....
The Midland Ditch.....	Little Navajo c'k.....	Jan. 15, 1891.....	Nov. 3, 1890.....	4.00.....	Joseph Whittaker <i>et al.</i>
The Hallett Ditch.....	Mill creek.....	Jan. 20, 1891.....	April 10, 1885.....	5.00.....	J. H. Hallett.....
The Navajo Milling and Irrigation Ditch.....	Navajo creek.....	Jan. 27, 1891.....	April 1886.....	62.50.....	V. M. and Henry Harpst.....
The Harpst, Dogget & Price Ditch.....	Navajo creek.....	Jan. 28, 1891.....	Oct. 31, 1890.....	6.00.....	Henry Harpst <i>et al.</i>
The Slim Show Ditch.....	Mill creek.....	Jan. 28, 1891.....	Aug. 1, 1890.....	11.00.....	Chas. M. Farrar.....
The Enlargement of Elmer Ditch and Nolan Enlargement.....	Little Navajo c'k.....	Feb. 17, 1891.....	Nov. 6, 1890.....	3.00.....	Edward McIntire.....
The Underwood Ditch.....	Big Navajo creek.....	April 25, 1891.....	May 1, 1888.....	150.00.....	L. M. Underwood.....
The Mason Ditch.....	Lightner creek.....	June 1, 1891.....	April 16, 1891.....	1.00.....	Thomas Mason.....
The J. R. Scott Ditch.....	Yellow Jacket c'k.....	June 10, 1891.....	May 20, 1886.....	3.00.....	J. R. Scott.....
The Taylor Ditch.....	Valecito river.....	June 10, 1891.....	May 15, 1881.....	7.00.....	Cora W. Taylor.....
The Mann & Hall Ditch.....	Stal Steiner creek.....	June 10, 1891.....	April 13, 1891.....	4.00.....	Enoch Mann <i>et al.</i>
The Frederick Lupke Ditch.....	Four springs.....	June 17, 1891.....	Nov. 1, 1887.....	3.00.....	Frederick Lupke.....

The High Line Ditch	Sept. 15, 1891	July 1, 1891	6.00	Charles F. Crame
The Voorhees Enlargement of the Nolan Enlargement and of McIntire Enlargement of the Elmer Ditch.....	Sept. 15, 1891	June 13, 1891	3.00	Mrs. M. J. Voorhees
The Linn & Clark Ditch	Sept. 15, 1891	July 17, 1891	8.00	John A. Linn <i>et al.</i>
The Underwood Mill and Irri- gating Ditch.....	Dec. 28, 1891	Oct. 12, 1891	72.00	Wm. Underwood
Little Navajo creek				
Little Navajo creek				
Dutton creek				
Navajo creek				

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 30, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Thompson Irrigating Ditch.	Fall creek	Oct. 21, 1891	June 1, 1884	1.00	Samuel H. Thompson
The Water Witch Ditch	Junction creek	Dec. 9, 1891	May 5, 1882	1.00	T. E. Peterson
The Duffield Ditch	Springs	Dec. 26, 1891	June 15, 1886	3.00	Robert A. Duffield
The Crystal Springs Pipe Line.	Spring and Deer	Feb. 17, 1892	Jan. 28, 1892	2.25	Wm. H. C. Folsom
The Spring Creek Feeder	Spring creek	Feb. 17, 1892	Jan. 28, 1892	1.125	Wm. H. C. Folsom
The Deer Creek Feeder	Deer creek	Feb. 17, 1892	Jan. 28, 1892	1.125	Wm. H. C. Folsom

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 31, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Techan Ditch.....	Dry creek.....	May 12, 1892	April 21, 1892	2.00	..... John Techan
The Beaver Ditch.....	Beaver creek.....	July 5, 1892	April 20, 1884	1.25	..... L. R. Lange
The Lange Ditch.....	Macks creek.....	July 5, 1892	April 4, 1890	1.25	..... L. R. Lange

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 32, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Ute Ditch.....	Pine creek.....	Dec. 28, 1891	Feb. 28, 1891	5.50	.....John Y. Carpenter <i>et al.</i>
The Battle Creek Ditch.....	McElmo creek.....	Dec. 28, 1891	Jan. 26, 1891	8.00	.....M. G. Carpenter <i>et al.</i>
The El Primo Ditch.....	McElmo creek.....	Mar. 28, 1892	June 1, 1887	9.00	.....John S. Wilson

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 34, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The French & Hamby Ditch	Springs	Mar. 3, 1892	May 1, 1890	30.00	John Hamby <i>et al.</i>
The Extension of Sheek Ditch	Rio Mancos	April 22, 1892	May 1, 1889	4.00	Joseph S. Sheek
The Reservoir Extension Ditch	Rio Mancos	June 30, 1892	Aug. 9, 1891	30.00	Richard Wetherill
The Long Park Ditch	Middle Mancos c'k	June 30, 1892	Sep. 16, 1888	5.00	J. Martin Rush, Jr., <i>et al.</i>
The Webber Ditch No. 2	Rio Mancos	June 30, 1892	May 7, 1889	33.00	John Perkins <i>et al.</i>

CHAPTER VI.

IRRIGATION DIVISION NO. 5.

GRAND RIVER DIVISION.

E. B. Sawyer, Superintendent of Irrigation. Residence, Montrose, Colorado.

Mr. Sawyer not having favored this office with any detailed report of the transactions of his department, it is assumed the water supply has been such that few controversies have arisen calling for his services. There are nineteen water districts embraced in this division, ten of which are without Commissioners. Of the nine Commissioners in the service, six have furnished statistical statements for 1892, two for 1891, and one, D. F. Webster, of District 39, has failed to report. It may be said for Mr. Webster that his appointment only dates from July 13, 1892, after the season was well advanced, and doubtless the data for a statement were not at his command.

The tabulated statistical summary of eight districts herewith given, shows the distribution of water through 469 ditches, having an aggregate length of 1,414.75 miles, and covering 221,109 acres of land, of which area 111,552 acres, or about one-half, have been irrigated.

District No. 41, comprising the Uncompahgre Valley, in Montrose County, gives a total area irrigated of 53,418 acres, or nearly one-half of the entire acreage reported in the division, and an increase of 36,636 acres over the year 1890. This district also makes a showing of 2,197 acres in orchards, exceeding one half of the total area concerning which statements are made.

District No. 42, embracing a large portion of Mesa County, has a total area irrigated of 19,830 acres; in orchards, 1,843 acres.

District No. 40, embracing Delta County, to whose enterprising citizens frequent awards of premiums have been made for the best and largest display of apples, grapes and stoned fruits at the various horticultural fairs, has no statement of orchard acreage, but shows an increase of 6,861 acres in total area irrigated as compared with 1890.

The statement for District No. 61 includes the statistics of the canal system of "The Colorado Consolidated Land and Water Company," covering the Montezuma Valley, furnished the Water Commissioner, by S. W. Carpenter, General Manager, which are as follows, to wit:

Length of canals and laterals in miles.....	100
Number of days water was carried.....	190
Average amount of water carried in second feet.....	100
Number of acres that can be irrigated.....	75,000
Acreage irrigated in 1892—	
Wheat.....	1,200
Oats.....	900
Corn.....	800
Sorghum.....	50
Potatoes.....	200
Alfalfa.....	900
Timothy.....	125
Wild Hay.....	150
Orchard.....	75
Miscellaneous.....	100
<hr/>	
Total acres.....	5,400

It is a pleasure to note the above developments in the charming valley of the Montezuma. With an elaborate canal system, an abundance of water, fertile soils with gentle slopes, an equable climate and picturesque surroundings, its 75,000 acres of arable lands under ditch should meet with rapid settlement, and largely increased cultivation in the near future.

IRRIGATION STATISTICS OF DIVISION NO. 5,

CONDENSED FROM THE REPORTS OF THE SEVERAL WATER COMMISSIONERS FOR THE YEARS 1891 AND 1892, SHOWING A FAIR AVERAGE FOR THOSE TWO YEARS.

NO. OF DISTRICT.	Report of	Number of ditches reported.	Total length as reported.	Average amount of water carried during the season in cubic feet per second of time.	Number of acres that can be irrigated.	Number of acres of alfalfa irrigated.	Number of acres of seeded grasses other than alfalfa irrigated.	Number of acres of natural grasses irrigated.	Number of acres of other crops irrigated.	Number of acres of orchard irrigated.	Number of acres irrigated by seepage.	Number of acres irrigated from reservoirs.	Total number of acres irrigated.
28*													
36*													
37	1892	8	21.75	81.00	2,860	380	230	80	1,720				2,410
38	1892	111	184.02	1,782.00	17,261	2,309	1,706	1,766	3,483	141			9,405
39†													
40	1891	71	297.00	214.75	26,305	5,439	1,467	681	3,613		30		11,230
41	1892	64	374.50	588.38	85,282	13,899	931	1,005	35,386	2,197			53,418
42	1892	110	260.04			6,823	295	5,381	5,488	1,843			19,830
45	1891	10	89.00	30.60		1,665		1,087	1,884				4,636

[illegible]

*Water rights not adjudicated. No Commissioner yet. †Commissioner appointed July 13, 1892. No report received.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 28, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Pitkin Town Ditch No. 1.	Quartz creek.	Feb. 2, 1891	July 19, 1880	7.45	The Town of Pitkin
The Pitkin Town Ditch No. 2	Quartz creek	Feb. 2, 1891	Nov. 22, 1890	3.50	The Town of Pitkin
The D. W. Biebel Ditch No. 1.	Tomichi creek.	Mar. 2, 1891	Oct. 30, 1890	80.00	D. W. Biebel
The D. W. Biebel Ditch No. 2	Tomichi creek.	Mar. 2, 1891	Oct. 30, 1890	10.00	D. W. Biebel
The D. W. Biebel Ditch No. 3	Not stated.	Mar. 2, 1891	Oct. 30, 1890	10.00	D. W. Biebel
The Chapman Willard Ditch.	Hot Springs creek	June 29, 1891	May 13, 1890	4.80	John B. Chapman <i>et al.</i>
The Tarkington Irrigating Ditch	Quartz creek	July 29, 1891	May 10, 1891	9.00	Daniel M. Tarkington
The McLeod Ditch.	Tomichi creek	July 15, 1891	June 12, 1891	18.00	Alexander T. McLeod
The McLeod-Davis Gulch Ditch	Davis gulch.	July 15, 1891	June 12, 1891	18 00	Alexander T. McLeod
The Logan Eastside Ditch.	Tomichi creek	July 15, 1891	June 10, 1891	11.00	J. Q. Logan
The Logan Westside Ditch.	Tomichi creek	July 15, 1891	Sep. 10, 1889	11.00	J. Q. Logan
The Star Ditch.	Marshall creek	July 15, 1881	May 15, 1891	18.00	Starr Nelson
The Nelson Ditch.	Marshall creek	July 15, 1891	May 15, 1891	18.00	Starr Nelson
The Razor Creek Ditch.	Razor creek	July 15, 1891	May 25, 1879	11.50	Samuel Parrott
The Prosser Irrigat'g Ditch No. 1	Razor creek	July 15, 1891	Aug. 1, 1870	18.00	W. R. Prosser

The Prosser Irrigating Ditch No. 2	Razor creek	July 15, 1891	Aug. 1, 1870	18.00	W. R. Prosser
The Prosser Irrigating Ditch No. 3	Razor creek	July 15, 1891	Aug. 1, 1870	18.00	W. R. Prosser
The Prosser Irrigating Ditch No. 4	Razor creek	July 15, 1891	Aug. 1, 1870	18.00	W. R. Prosser
The Cane Irrigating Ditch	Tomichi creek	Aug. 4, 1891	May 10, 1882	9.00	Wilson Moore <i>et al.</i>
The Borsum Ditch	Tomichi creek	Aug. 4, 1891	May 10, 1882	9.00	Wilson Moore <i>et al.</i>
The Elmer E. Doyle Irrigating Ditch	Little Doyle creek	Aug. 4, 1891	May 10, 1889	9.00	Elmer E. Doyle
The White East Side Ditch	Pitkin gulch	Aug. 4, 1891	May 10, 1886	11.00	William D. White
The White West Side Ditch	Pitkin gulch	Aug. 4, 1891	May 10, 1886	11.00	William D. White
The Gooseberry Mesa Irrigating Ditch	Ohio creek	Aug. 4, 1891	Dec. 14, 1886	6.50	John M. Allen <i>et al.</i>
The Slough Ditch	{ Slough and part } { Tomichi creek }	Aug. 4, 1891	Aug. 1, 1892	9.00	Levi Lewis Bush
The McGlashan North Side Mill Creek	Mill creek	Aug. 4, 1891	Oct. 1, 1883	44.00	J. S. McGlashan
The McGlashan South Side Ditch	Mill creek	Aug. 4, 1891	Oct. 1, 1883	44.00	J. S. McGlashan
The McGlashan East Side Ohio Creek	Ohio creek	Aug. 4, 1891	Oct. 1, 1883	44.00	J. S. McGlashan
The McGlashan West Side Ditch	Ohio creek	Aug. 4, 1891	Oct. 1, 1883	44.00	J. S. McGlashan
The Goodman Ditch	{ Tributary of To- } { michi creek }	Aug. 4, 1891	June 16, 1891	9.00	Thomas P. Goodman
The Wilson Ohio Creek Ditch	Ohio creek	Aug. 4, 1891	May 10, 1891	22.00	Joseph W. Wilson
The Flick Irrigating Ditch No. 1	Quartz creek	Oct. 13, 1891	June 15, 1883	9.00	John M. Flick
The Flick Irrigating Ditch No. 2	Quartz creek	Oct. 13, 1891	June 15, 1883	9.00	John M. Flick
The Vernay Ditch	Tomichi creek	Nov. 14, 1891	Oct. 15, 1890	15.00	Peter Vernay
The Frank Adams Ditch No. 1	Gunnison river	Dec. 7, 1891	Sept. 1877	80.70	Frank Adams <i>et al.</i>
The Jennings South Ditch	Tomichi creek	Dec. 7, 1891	Sept. 16, 1891	10.00	J. W. Jennings
The Morton Hot Springs Ditch	Hot Springs creek	Dec. 19, 1891	June 1, 1878	5.00	Henry J. Morton

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Mortons & Coates Tomichi } Creek Ditch.....	Tomichi creek	Dec. 19, 1891	July 1, 1879	8.00	Henry J. Morton
The Outcalt Ditch.....	Tomichi creek	Feb. 18, 1892	May 15, 1879	16.93	W. W. Outcalt <i>et al.</i>
The Cutjo Ditch.....	Quartz creek	Mar. 3, 1892	June 15, 1883	31.12	J. W. Long <i>et al.</i>
The McConnell Irrigating Ditch.	Quartz creek	Mar. 9, 1892	May 1, 1888	18.00	William Reed <i>et al.</i>
The G. B. H. Ditch.....	Tomichi creek	Mar. 24, 1892	April, 1889	Not given	G. Gilbertson <i>et al.</i>
The Cabin Creek Ditch.....	Cabin creek	May 5, 1892	1878	14.00	J. W. Jennings
The Jennings & Elson Ditch....	Tomichi creek	May 5, 1892	1885	18.00	J. W. Jennings and J. P. Elson
The Stephenson Ditch.....	Tomichi creek	June 2, 1892	May 1, 1878	10.70	E. Stephenson

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT No. 37, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, A. L. FERGUSON GYPSUM. APPOINTED 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Graham Ditch.....	Willow creek.....	Dec. 17, 1890	May 1, 1890	5.00	M. E. Graham
The Graham Ditch.....	Eagle river.....	Dec. 17, 1890	June 1, 1889	7.00	M. E. Graham
The Stremme & Gates Ditch.....	Eagle river.....	Mar. 9, 1891	Nov. 1, 1888	10.50	John Stremme and J. T. Gates
The Smalley Ditch.....	Cottonwood creek.....	Sept. 7, 1891	April 15, 1888	2.00	T. J. Anderson
The Mesa Ditch.....	Brush creek.....	Sept. 7, 1891	May 1, 1891	18.00	{ The Cresive Land & Cattle Company (enlargement of the C. M. White Ditch).
The Stremme & Gates Ditch, { enlargement.....	Eagle river.....	Oct. 12, 1891	Sept. 14, 1891	10.00	{ The Cresive Land & Cattle Company (enlargement of the C. M. White Ditch).
The Doggett & Parker Ditch.....	Gypsum creek.....	Dec. 15, 1891	1888	18.00	Edward Slaughter, <i>et al.</i> , (enlargement)
The Flenner & McBrayer Ditch.....	Gypsum creek.....	Dec. 15, 1891	1882	6.00	Edward Slaughter, <i>et al.</i> , (enlargement)
The High Line Ditch.....	East Lake creek.....	Jan. 5, 1892	Nov. 25, 1890	2.00	Isaac W. Porter
The Peter Nelson Ditch.....	Grouse creek.....	Jan. 8, 1892	Sept. 10, 1889	6.00	Peer Nelson
The Hawley & Rees Ditch.....	W. fork Lake creek.....	Feb. 8, 1892	May 1, 1890	5.33	Theodore A. Hawley and David W. Rees
The Pando Ditch.....	Voder creek.....	Mar. 18, 1892	May 15, 1890	2.00	F. S. Yoder
The Grizzly Ditch.....	Grizzly creek.....	Aug. 10, 1892	Aug. 4, 1892	9.25	Frank M. Moorehead
The Booco Ditch.....	Alkali creek.....	Nov. 23, 1892	May 20, 1890	2.00	Thomas N. Evans

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 38, SHOWING MODIFICATIONS IN THE DECREES IN SAID DISTRICT, PREPARED FROM CERTIFIED COPIES FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

NAME OF DITCH OR CANAL	Stream from which water is taken.	Date of appropriation	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Waco Ditch.....	Woody creek.....	June 18, 1880	4.00	.....	.....	1
The Prince Ditch.....	Antler creek.....	April 1, 1881	2.60	.....	9.60	6
The Light Ditch.....	East Sopris creek.....	May 15, 1881	3.00	.....	24.50	10 A
The Pioneer Ditch.....	Thompson creek.....	Oct. 15, 1881	.70	.....	35.80	18 A
The Hardwick Ditch.....	Hardwick gulch.....	Mar. 5, 1882	1.30	.....	41.90	21 A
The Kendall & Stricklett Ditch.....	A spring.....	May 15, 1882	.10	.....	58.40	28 A
The Landis No. 1 Ditch.....	Landis creek.....	June 1, 1882	1.60	.....	75.70	36 A
The Landis No. 2. Ditch.....	Landis creek.....	June 1, 1882	1.60	.....	77.30	36 B
The Barger Ditch.....	Cattle creek.....	June 13, 1882	.50	.....	79.70	37 A
The O. K. Ditch.....	Landis creek.....	May 1, 1884	1.20	.....	195.50	91 A
The Collins Creek Ditch, first enlargement.....	Collins creek.....	June 29, 1884	1.30	3.00	203.20	97 A
The Ralston No. 1 Ditch.....	Coulter creek.....	Oct. 1, 1884	1.00	.....	213.60	194 A
The Buck Farm Ditch.....	Four Mile creek.....	Oct. 15, 1884	2.40	.....	214.60	194 B

The Waco Ditch, first enlargement	Woody creek	Nov. 12, 1884	5.75	9.75	217.00	105
The Forker & Gibson Ditch	Landis creek	April 30, 1885	5.50	-----	254.55	117 A
The Buffalo Ditch	West Fork Sopris creek	June 5, 1885	.50	-----	266.15	123 A
The Keeton and Emerson Ditch	Mesa creek	June 15, 1885	1.20	-----	271.65	124 A
The Waddell Ditch	Sunshine creek	Sept. 15, 1885	.60	-----	311.35	133 A
The Frank Chapman Ditch	Landis creek	April 25, 1886	2.00	-----	342.65	143 A
The Waco Ditch, second enlargement	Woody creek	May 1, 1886	1.80	This priority cancel'd	-----	145
The Collins Creek Ditch, second enlargement	Collins creek	May 15, 1886	.30	3.30	351.65	148 A
The Lignite Ditch	Four Mile creek	May 15, 1886	2.40	-----	352.45	149 A
The Collins Creek Ditch, extension to Woody Creek	Woody creek	Aug 14, 1886	3.30*	-----	381.65	161 A
The Waters Ditch	Chippewee run	Mar. 15, 1887	.70	-----	405.05	167 A
The Lignite Ditch, first enlargement	Four Mile creek	June 1, 1887	.60	3.00	445.95	179 A
The McKown Ditch	Four Mile creek	July 23, 1887	1.50	-----	450.45	181 A
The Lynch Ditch	Four Mile creek	Sept. 1, 1887	2.00	-----	453.45	182 A

* NOTE.—The total amount to be taken by the Collins creek from Collins creek or Woody creek, or from both of them, shall not exceed 3.30 feet at any one time. Any part of that amount taken from either creek shall be deducted from said 3.30 feet to determine the amount that may, at that time, to be taken from the other creeks.



STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 38, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.—WATER COMMISSIONER, S. S. SEARS, CARBONDALE, APPOINTED MARCH 14, 1890.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Southard & Cavanagh Ditch	Rock creek	Dec. 1, 1890	Mar. 23, 1885	5.00	Chas. Frauert <i>et al.</i>
The Hughes Ditch	Capitol creek	Dec. 8, 1890	Nov. 4, 1888	8.40	Dennis Hughes
The Spring Creek Ditch	Spring creek	Jan. 16, 1891	Sept. 1, 1885	5.00	Grabriel Luckstinger
The Frying Pan Ditch	Frying Pan creek.	Jan. 16, 1891	Sept. 15, 1886	3.00	Grabriel Luckstinger
The Midland Flume	Castle creek	Jan. 29, 1891	June 28, 1889	46.00	H. P. Covenhoven <i>et al.</i>
The Mawherter Ditch	{ South branch of } { Roaring Fork. }	Feb. 4, 1891	1883	Not stated	G. J. Mawherter
The Godwin Ditch	Spring creek.	Feb. 5, 1891	July 1, 1886	2.00	Janet Goodwin
The Arkins Ditch No. 1	Brush creek	Mar. 9, 1891	June 1, 1885	8.40	Mitchell Arkins
The Arkins Ditch No. 2	Brush creek	Mar. 9, 1891	Mar. 1, 1886	8.40	Mitchell Arkins
The Walter Ditch	Snow Mass creek.	Mar. 12, 1891	Apr. 2, 1883	4.00	Charles D. Walter
The Dalton & Robinson Ditch	Roaring Fork riv'r	Mar. 19, 1891	May 1, 1882	8.00	F. Frank Dalton <i>et al.</i>
The Cox Ditch	Roaring Fork riv'r	Mar. 19, 1891	June 1, 1883	6.00	T. N. Henry <i>et al.</i>
The Mason Ditch	Cattle creek	Mar. 23, 1891	Apr. 1, 1885	1.50	John Gregory <i>et al.</i>
The Elk Creek Ditch	Elk creek	Apr. 1891	June 15, 1890	8.40	Edwin Powell

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in the State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The East Snow Mass and Brush Creek Ditch.....	East Snow Mass creek.....	April 3, 1891	Jan. 11, 1891	108.20	John Lundgren <i>et al.</i> (Amended statement.)
The Station Spring and Spring Ditch.....	Spring gulch.....	April 7, 1891	Mar. 30, 1891	1.00	Hyrcanus Staton
The Union Irrigating Ditch.....	Roaring Fork riv'r.....	May 8, 1891	April 20, 1884	14.00	J. W. Zimmerman <i>et al.</i>
The Carbondale Ditch.....	Rock creek.....	May 11, 1891	April 1, 1887	5.00	August Summicht. (Amended statement.)
The Sunmicht Enlargement of the Carbondale Ditch.....	Rock creek.....		Feb. 25, 1889	97.50	August Summicht. (Amended statement.)
The Powell Ditch.....	Snow Mass creek.....	June 1, 1891	July 1888	12.50	Edwin Powell
The F. McNulty Ditch.....	Large spring.....	June 4, 1891	Sep. 5, 1885	.53	Thomas McNulty
The Lewis Enlargement of the C. and M. Ditch.....	Cattle creek.....	June 6, 1891	June 26, 1885	6.00	Wilbert G. Lewis
The Van Cleve No. 2 Ditch.....	A spring.....	June 10, 1891	Sep. 15, 1882	1.50	Philip H. Van Cleve <i>et al.</i>
The Enlargement of same.....			May 15, 1885	2.50	Philip H. Van Cleve <i>et al.</i>
The Powell Ditch.....	Snow Mass creek.....	June 10, 1891	June 1887	12.50	Edwin Powell
The Green Meadow Ditch.....	Capitol creek.....	June 20, 1891	Sep. 5, 1882	25.40	Maggie Light <i>et al.</i>
The Martin Extension of King Ditch.....	West Sopris creek.....	June 23, 1891	May 1, 1886	3.50	James H. Martin
The Green Enlargement Ditch Extension.....	Willow creek.....	June 25, 1891	Spring 1885	32.00	R. R. Bowles <i>et al.</i>

The Patrick & Waters Springs } Ditch.....	Springs.....	July 28, 1891	May 1, 1891	2.00	Patrick Waters
The Ide Ditch.....	Snow Mass creek.....	Aug. 1, 1891	July 1, 1891	10.40	James A. Ide
The Pearson Spring Ditch.....	A spring.....	Sept. 2, 1891	Aug. 15, 1888	2.00	John Pearson
The Needham Ditch.....	Cattle creek.....	Sept. 14, 1891	July 4, 1884	6.00	James O. Needham
The Pattison Ditch.....	Mesa creek.....	Sept. 17, 1891	July 1, 1890	1.50	D. A. Pattison
The Perham Ditch.....	} South Thompson } creek.....	Oct. 12, 1891	Aug. 9, 1888	5.00	Elbridge Perham
The Grub & Thompson Ditch.....	Rock creek.....	Oct. 12, 1891	Sept. 2, 1890	20.00	E. H. Grubb <i>et al.</i>
The Cummings High Line Ditch.....	Roaring Fork river.....	Nov. 7, 1891	Aug. 5, 1890	2.00	John Cummings
The Schueler & Stockders Con- centrating Flume.....	Roaring Fork river.....	Feb. 1, 1892	May 1, 1891	58.00	Schueler & Stockders (for concentrator on)
The Snow Mass Divide Ditch.....	Snow Mass creek.....	April 26, 1892	June 25, 1889	9.00	A. B. Foster <i>et al.</i>
The Bowles & Holland Ditch.....	Rock creek.....	May 10, 1892	April 9, 1884	28.00	Samuel Bowles and Oscar Holland
The Lewis Ditch.....	Cattle creek.....	June 13, 1892	June 15, 1882	1.00	Wilbert E. Lewis
The Enlargement of the Vance Spring Ditch.....	Vance gulch.....	June 21, 1892	May 1, 1892	2.00	John C. Smith
The Castle Creek Flume Ditch.....	Castle creek.....	June 25, 1892	Nov. 16, 1885	60.00	The Castle Creek Water Company
The Midland Flume Ditch.....	Castle creek.....	June 25, 1892	May 11, 1889	100.00	The Midland Water Power Company
The Maroon Ditch.....	Maroon creek.....	Aug. 12, 1882	June 22, 1892	65.00	Henry P. Cowenhowen
The Clark Ditch.....	A spring.....	Nov. 7, 1892	May 15, 1890	1.00	Wallace Clark

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 39, SHOWING THE MODIFICATIONS IN THE DECREES GOVERNING APPROPRIATIONS IN SAID DISTRICT FROM THE CERTIFIED COPY FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREES.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
The Ware & Hinds Ditch	Elk creek	Oct. 1, 1883	5.00	---	---	15
The Box Canon Ditch	East Fork Rifle creek	April 15, 1885	1.00	---	---	40 A
The Rifle Falls Ditch	East Fork Rifle creek	May 1, 1885	1.00	---	---	42 A
The Burton Ditch	Mitchell creek	June 20, 1885	.40	---	---	48 A
The Ware & Hinds Ditch, first enlargement	Elk creek	Mar. 1, 1886	10.30	---	---	57
The Anderson & Hayes Ditch	Dry Fork of Roan creek	Mar. 28, 1886	1.00	---	---	61
The Pioneer Ditch	Rifle creek	April 1, 1886	1.90	6.90	---	62
The Clear Creek Ditch	Clear creek	April 9, 1886	7.30	---	---	63
The Dry Fork Ditch	Dry Fork of Roan creek	April 12, 1886	1.40	---	---	64
The Mansfield Ditch	West Fork of Elk creek	April 16, 1886	1.00	---	---	65
The Frasier Ditch	Kimball creek	April 16, 1886	2.90	---	---	66

The Heinze Ditch.....	Middle Fork Rifle creek	April 20, 1886	1.00	-----	67
The Manning Ditch.....	Middle Fork Rifle creek	April 26, 1886	1 60	-----	68
The Crystle Falls Ditch.....	East Fork Rifle creek	May 5, 1886	1.50	-----	68 A
The Bridges Ditch.....	Brush creek	May 10, 1887	.80	-----	111 A
The Waggoner Ditch.....	East Fork of Elk creek	Mar. 20, 1887	2.00	-----	114 A
The Hayes Ditch.....	East Branch Brush creek	April 3, 1888	2.00	-----	133 A

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 39, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, DANIEL F. WEBSTER, APPOINTED JULY 13, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Red Glen High Line Ditch.	E. Fork Elk creek	Dec. 24, 1890	Nov. 20, 1890	8.00	Charles O. Pierson <i>et al.</i>
The Fogarty Ditch.	Spring creek	Jan. 21, 1891	Dec. 15, 1890	8.00	Richard Fogarty
The Diamond Extension Ditch.	Parachute creek	Feb. 2, 1891	April 23, 1888	7.33	Sarah Brown
The Andrew Gallo Enlargement of the Rifle Creek Canon Ditch.	Rifle creek	Mar. 11, 1891	Feb. 13, 1891	2.45	Andrew Gallo
The Babcock Enlargement of the Rifle Creek Canon Ditch.	Rifle creek	May 5, 1891	April 6, 1891	2.00	S. F. Babcock
The Flyer Ditch	Grand river	May 16, 1891	Mar. 1, 1884	13.96	R. H. Zimmerman <i>et al.</i>
The Third Enlargement of Cornell Ditch.	Parachute creek	June 6, 1891	May 26, 1891	11.50	C. M. White
The Heinze Ditch, First Enlargement.	Middle f'k Rifle c'k	June 24, 1891	Feb. 15, 1888	2.50	Herman Heinze
The Manning & Ritter Ditch, First Enlargement.	Middle f'k Rifle c'k	June 24, 1891	June 25, 1887	2.50	John M. Manning <i>et al.</i>
The Romer Ditch.	Roan creek	Aug. 19, 1891	Sept. 15, 1888	1.00	John H. Romer

The Benson and Barnett Ditch	Parachute creek.	Aug. 27, 1891	Mar. 25, 1890	10.00	Prunia Barnett <i>et al.</i>
The Garden Gulch Ditch	Garden Gulch cr'k	Aug. 27, 1891	Mar. 25, 1890	4.00	Prunia Barnett
The Carlisle Ditch	Dry Fork creek	Sept. 1, 1891	Nov. 1, 1890	4.00	Sarah L. Carlisle
The Evans Ditch	{ Gulch from Grand river }	Oct. 24, 1891	Oct. 19, 1891	3.00	Thos. S. Evans
The Billeter Ditch	Dry gulch	Nov. 10, 1891	May. 5, 1891	3.33	Martin Billeter
The Benson Ditch	Parachute creek	Dec. 21, 1891	April 1, 1891	1.50	Arcadius Benson
The Benson and Barnett Ditch	Parachute creek	Dec. 21, 1891	Mar. 5, 1890	10.00	Arcadius Benson and Miss Prunia Barnett
The Roan Creek No. 3 Ditch	Roan creek	Dec. 21, 1891	Oct. 15, 1884	10.00	Wesley Burkett <i>et al.</i>
The Clarke Ditch	{ West Fork of Rifle creek }	Jan. 26, 1892	Mar. 15, 1888	2.00	William L. Clarke
The Rulison & Miller Ditch	Grand river.	Feb. 11, 1892	Dec. 8, 1891	70.00	Chas. M. Rulison and John F. Miller
The Elmer Cook Ditch	Cottonwood creek	Feb. 17, 1892	Sept. 15, 1888	2.60	Elmer Cook
The Parachute Ditch	Parachute creek	Feb. 20, 1892	April 1, 1888	3.36	Marion K. Wall <i>et al.</i>
The Holmes-Morgan Enlargement and Extension of the Parachute Ditch	Parachute creek	Mar. 24, 1892	Nov. 9, 1891	5.60	Walter S. Holmes and John T. Morgan
The Yeoman Enlargement of the Low Cost Ditch	Parachute creek	June 21, 1892	April 24, 1889	17.00	Enos F. Yeoman
The M. C. & Y. Ditch	Parachute creek.	June 21, 1892	Nov. 12, 1891	5.00	Enos F. Yeoman <i>et al.</i>
The Dry Creek Ditch	Dry creek	July 11, 1892	April 23, 1885	10.00	Peter Kearney
The Reservoir Enlargement Ditch	Roan creek	Aug. 18, 1892	July 1, 1892	5.30	Wm. McDowell and Bryson P. Blair
The Will Mahan Enlargement of the Roan Creek Ditch No. 3	Roan creek	Nov. 3, 1892	Aug. 1, 1892	.50	Will Mahan
The Purdy Ditch	Parachute creek.	Nov. 7, 1892	April 5, 1890	5.00	James Wheeler <i>et al.</i>

STATEMENT CONCERNING DITCHES.—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Brenton Enlargement of the Rifle Creek Ditch	Rifle creek	Nov. 7, 1892	Nov. 14, 1887	3.00	J. C. Acklin
The Emmen Enlargement of the Nott Ditch No. 2.	Mitchell creek	Nov. 7, 1892	Oct. 19, 1892	1.00	H. W. Emmen

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 39, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Babcock Reservoir.....	Rifle creek.....	Rifle creek can- on ditch.....	May 5, 1891	April 6, 1891	400,000	S. E. Babcock
The Evans Reservoir.....	Gulch, unnamed.....	Evans ditch.....	Oct. 24, 1891	Oct. 19, 1891	875,000	Thos. S. Evans
The Thompson Reservoir.....	West Rifle creek.....	Feeder.....	June 22, 1892	April 2, 1888	140,000	L. E. Thompson
The Clarke Enlargement of the Thompson Reservoir. }	West Rifle creek.....	Feeder.....	June 22, 1892	June 21, 1891	135,000	William L. Clarke

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 40, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
 DECEMBER 1, 1890, TO DECEMBER 1, 1892.—WATER COMMISSIONER, HERBERT A. CASTLE, DELTA, COLO. APPOINTED APRIL
 27, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Nowland Ditch.....	Gulch Nos. 1 and 2	Dec. 12, 1890	Dec. 8, 1890	4.00	John S. Nowland
The Mineral Spring Ditch.....	Current creek	Dec. 26, 1890	Oct. 31, 1890	10.00	George L. Smith
Shindledecker Creek Ditch.....	Shindledecker cr'k	Jan. 8, 1891	June 15, 1890	6.00	Charles H. Gray <i>et al.</i>
The Love Ditch.....	{ North Fork Gun- nison river..... }	Jan. 29, 1891	May 1, 1884	3.00	Robert E. Love <i>et al.</i>
The North Fork Farmers Ditch.....	North Fork river.	Feb. 24, 1891	Feb. 3, 1888	32.04	W. F. Hawkey <i>et al.</i>
The Peach Ditch.....	A gulch	Mar. 28, 1891	Jan. 5, 1891	5.00	Lewis L. Biglow
The Catch Ditch.....	Seepage water	Mar. 30, 1891	Mar. 13, 1891	7.50	Lewis L. Biglow <i>et al.</i>
The Daisy Ditch.....	Big gulch.....	April 4, 1891	Not given	4.00	Harrison W. Bull <i>et al.</i>
The G. L. Ditch.....	Platt gulch.....	April 10, 1891	Mar. 21, 1891	7.35	John H. Garren <i>et al.</i>
The States Ditch.....	Waste water	May 16, 1891	May 1, 1890	2.00	George W. States
The Estes Ditch.....	A gulch	May 18, 1891	April 17, 1891	6.60	O. A. Estes
The Omega Ditch.....	Surface creek.....	May 27, 1891	Feb. 24, 1891	10.00	John E. Cole <i>et al.</i>
The Combination Ditch.....	Big Draw gulch.....	June 1, 1891	Mar. 14, 1891	6.00	C. P. Olmstead <i>et al.</i>

The Bona Fide Ditch.	Gunnison river.	June 30, 1891	Dec. 10, 1891	65.00	The Bona Fide Ditch Company
The Texas Ditch	{ Little Clear Fork } creek	July 6, 1891	Not given.	5.00	V. H. Kennedy and W. H. Taylor
The Gove Ditch Continuation.	Waste water	July 23, 1891	{ May 1885 } { May 1888 }	2.00 } .50 }	A. M. Gove
The Riley Ditch	Bell creek	July 27, 1891	June 10, 1891	12.20	George Riley
The Big Gulch Ditch	Big gulch	July 28, 1891	June 8, 1891	4.00	James W. Cotton
The Meiberg Ditch	Bell creek	Oct. 2, 1891	May 1, 1889	3.00	August Meiberg
The Roberts Ditch	{ North Fork of } { Gunnison river }	Oct. 18, 1891	May 1, 1885	2.50	C. F. Roberts <i>et al.</i>
The Weir & Johnson Ditch	Surface creek	Nov. 11, 1891	May 5, 1890	9.00	Albert A. Weir <i>et al.</i>
The Pleasant View Mese Ditch	Surface creek	Nov. 16, 1891	Nov. 6, 1891	15.00.	George Bettinison <i>et al.</i>
The Bonita Ditch	Surface creek	Nov. 23, 1891	July 30, 1891	15.00	W. C. Strong
The North Fork Valley Ditch		Dec. 4, 1891	May 1, 1890	3.75	Gideon Sutton
The A. 1 Ditch	Seepage and waste	Jan. 2, 1892	Dec. 31, 1891	2.00	Abram C. Butler <i>et al.</i>
The Neighbors Ditch	Willanks gulch	Jan. 6, 1892	Nov. 29, 1891	6.00	H. J. Neighbors
The Sheppard & Wilnot Ditch	{ North Fork of } { Gunnison river }	Feb. 10, 1892	Dec. 5, 1889	14.00	William A. Sheppard <i>et al.</i>
The Eureka Ditch	Eureka gulch	April 14, 1892	Feb. 18, 1892	6.30	Peter Olson
The Clipper Lateral Ditch	Yarnell gulch	April 14, 1892	Fall of 1888.	8.00	Frank E. Wilber
The Tuff Ditch	Tuff gulch	April 14, 1892	May 2, 1888	10.50	Swan J. Alten
The Fleming Ditch	Big Gulch creek	April 25, 1892	Mar. 25, 1892	6.00	Isaac G. Fleming
The Burton Ditch	Escalante creek	June 8, 1892	Mar. 10, 1892	4.00	James H. Burton
The Short Ditch	{ North Fork of } { Gunnison river }	June 14, 1892	Nov. 18, 1889	28.00	Frank B. Short

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Ingersoll & Purington Ditch.	Waste and seepage	June 28, 1892	March, 1892	Not given.	H. H. Ingersoll and J. B. Purington
The Obert Ditch.....	Springs and waste	Aug. 10, 1892	Aug. 8, 1892	12.00	Joseph S. Abert
The Pleasant View Mesa Ditch..	Surface creek.....	Aug. 16, 1892	April 25, 1892	50.00	John W. Gallant <i>et al.</i>
The Roerber Ditch.....	Lucas creek.....	Aug. 24, 1892	August, 1890	6.00	Theodore Roerber
The Duke Ditch.....	Leroux crk. & wst.	Sept. 3, 1892	Aug. 20, 1892	8.10	Edward M. Duke
The Fairview Ditch.....	Lone Tree creek...	Sept. 12, 1892	June 24, 1892	16.00	Swan W. Alten
The Roerber Ditch No. 1.	Inter-Ocean ditch.	Sept. 16, 1892	August, 1890	6.00	Theodore Roerber
The Roerber Ditch No. 2.....	German creek.....	Sept. 16, 1892	August, 1890	6.00	Theodore Roerber
The Greggs Ditch.....	Waste and seepage	Sept. 23, 1892	Sept. 16, 1892	3.00	Lucy C. Greggs
The McCarthy Ditch.....	Escalante creek....	Nov. 1, 1892	Oct. 29, 1892	6.40	Justin McCarthy

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 40, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of Ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Quien Sabe Reservoir	Not stated.	Built in gulch.	Dec. 12, 1890	Oct. 29, 1890	870,000	A. J. Sparr
The Trichel Park Reservoir	Surface creek.	Built on stream.	Feb. 5, 1891	June 21, 1887	30,000,000	John H. Barton <i>et al.</i>
The Mount Lamborn Reservoir	Reynolds creek.	Built on stream.	June 23, 1891	June 10, 1891	933,000	J. D. Miller
The Soldier Park Reservoir	Drainage Surface c'k	Built in gulch.	Nov. 23, 1891	Aug. 9, 1891	3,750,000	Henry Kohler
The Fribble Reservoir	Younes creek	Built in gulch.	Dec. 14, 1891	July 21, 1891	3,920,000	John C. Pribble
The Miller Reservoir	Leroux creek	Built in gulch.	Jan. 14, 1892	Sept. 15, 1891	2,195,000	Charles R. Miller <i>et al.</i>
The Fisher Reservoir	Leroux creek	Built in gulch.	Jan. 14, 1892	Sept. 15, 1891	5,018,000	Charles R. Miller <i>et al.</i>
The Roeber Reservoir No. 1	{ Inter-Ocean ditch	Roeber ditches Nos. 1 & No. 2 }	Sept. 16, 1892	Aug.	5,223,200	Theodore Roeber
The Roeber Reservoir No. 2	{ and German creek					Theodore Roeber
The Stull Reservoir No. 1	Leroux creek	Built on stream.	Sept. 16, 1892	Aug. 5, 1892	5,188,560	David Stull and Jacob Stull
The Stull Reservoir No. 2	Leroux creek	Built on stream.	Sept. 16, 1892	Aug. 5, 1892	4,878,720	David Stull and Jacob Stull

STATEMENT CONCERNING RESERVOIRS—*Concluded.*

NAME OF RESERVOIR,	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Pleasant View Mesa Reservoir No. 1	Drainage, &c.	Built on stream	Oct. 12, 1892	Aug. 10, 1892	2,090,880	J. N. Castle <i>et al.</i>
The Pleasant View Mesa Reservoir No. 2	Drainage, &c.	Built on stream	Oct. 12, 1892	Aug. 10, 1892	1,415,700	J. N. Castle <i>et al.</i>
The Pleasant View Mesa Reservoir No. 3	Drainage, &c.	Built on stream	Oct. 12, 1892	Aug. 10, 1892	1,742,400	J. N. Castle <i>et al.</i>
The Pleasant View Mesa Reservoir No. 4	Drainage, &c.	Built on stream	Oct. 12, 1892	Aug. 10, 1892	1,415,700	J. N. Castle <i>et al.</i>
The Pleasant View Mesa Reservoir No. 5	Drainage, &c.	Built on stream	Oct. 12, 1892	Aug. 10, 1892	4,181,760	J. N. Castle <i>et al.</i>

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 41, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, W. J. TOLAND, MONTROSE, COLORADO. APPOINTED JUNE 1, 1891.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Easy Ditch No. 1.	Seepage waters	Dec. 11, 1890	Sept. 23, 1890	4.25	E. L. Young
The Easy Ditch No. 2.	Seepage waters	Dec. 11, 1890	Sept. 23, 1890	4.25	E. L. Young
The Ironstone Short Line Ditch.	Dry creek	Dec. 12, 1890	Mar. 1, 1888	Not given	D. P. Cook <i>et al.</i>
The Ironstone Short Line Extension Ditch.	Dry creek	Dec. 12, 1890	Oct. 24, 1890	11.15	D. P. Cook <i>et al.</i>
The Lower Dry Creek Seepage Ditch.	Dry creek	Dec. 15, 1890	Sept. 28, 1890	6.84	Herman O. Pear <i>et al.</i>
The Rim Rock Ditch	Dry creek	Jan. 5, 1891	Oct. 15, 1890	24.00	George Ash
The Subterranean Ditch	Dry & Roan creeks	Jan. 12, 1891	Sept. 20, 1890	17.30	C. E. Ash
The Subterranean Ditch Feeder	Seepage waters	Jan. 12, 1891	Sept. 20, 1890	Not given.	C. E. Ash
The Beaver Ditch	Buttermilk gulch	Jan. 16, 1891	May 1, 1887	3.00	George W. Harris
The Lanes Ditch	Dry creek	Feb. 9, 1891	Feb. 15, 1884	3.00	William H. Lines
The Fenlon Private Ditches Nos. 1 and 2	Not stated	Mar. 2, 1891	Not stated	Not given	No owner given. Plat only filed
The Enterprise Ditch	Snyder gulch	Mar. 9, 1891	Dec. 10, 1890	18.50	S. W. Warrington <i>et al.</i>
The C. A. Palmer Ditch	Spring creek	Mar 11, 1891	Mar. 1, 1891	3.00	C. A. Palmer

STATEMENT CONCERNING DITCHES—Concluded.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Rubideau Ditch	Buttermilk gulch	Mar. 25, 1891	Mar. 4, 1891	5.00	Suteliff and Halley <i>et al.</i>
The Draw Ditch	McGranahan gulch	Mar. 25, 1891	Mar. 18, 1891	5.00	Edward L. Kellogg
The Bly & Hase Ditch	Spring creek	April 13, 1891	Feb. 24, 1891	11.32	R. J. Bly <i>et al.</i>
The High Mesa Ditch	Uncompahgre riv'r	April 15, 1891	Mar. 1, 1889	23.00	The High Mesa Ditch Company
The McDonald Ditch	Uncompahgre riv'r	April 18, 1891	Feb. 10, 1887	44.00	A. G. McDonald <i>et al.</i>
The Ironstone Extension Ditch	Dry creek	April 18, 1891	Feb. 1, 1885	61.20	The Ironstone Extension Ditch Company
The Solid Muldoon Ditch	Smith's Fork creek	April 25, 1891	May 4, 1888	12.00	V. B. Piburn <i>et al.</i>
The Mowbray Ditch	{ Seepage and Lo- gan ditch }	May 6, 1891	April 10, 1885	5.00	James Mowbray
The Uncompahgre and Cedar Creek Valley Extension Ditch	Cedar creek	May 1, 1891	Dec. 24, 1889	52.00	Aaron Walters <i>et al.</i>
The Dry Creek Feeder to the Uncompahgre Canal	Dry creek	June 1, 1891	Mar. 1, 1887	195.00	The Montrose Canal Company
The Ludlow Ditch	Dry creek	Nov. 18, 1891	July 12, 1891	11.15	Daniel P. Cook

The Enlargement of the Uncompahgre (Loutzenheiser) Ditch {	Uncompahgre riv'r	Feb. 28, 1892	Nov. 25, 1891	212.71	..... The Loutzenheiser Ditch Company
Company Ditch {	Uncompahgre riv'r	May 2, 1892	April 1, 1892	70.00	..... The Montrose Electric Light Company
The Montrose Electric Light Company Ditch {	Uncompahgre riv'r	May 12, 1892	May 1, 1891	22.00	..... Jas. C. Taylor <i>et al.</i>
The East Side Reservation Ditch {	Dry creek {	May 13, 1892	Mar. 2, 1892	56.00	..... L. F. Kellogg and H. O. Bear
The Gypsum Ditch {	Uncompahgre riv'r	May 28, 1892	Feb. 10, 1892	25.00	..... Frank Dawson <i>et al.</i>
The Boomers Ditch {	Waste waters {	May 29, 1892	Mar. 31, 1892	5.00	..... Samuel V. Topliss
The Topliss Ditch {	Uncompahgre riv'r	Aug. 12, 1892	Feb. 3, 1888	39.00	..... O. D. Smith <i>et al.</i>
The Pinion Ditch {					

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 42, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—WATER COMMISSIONER, FRED W. HALBOWER, GRAND JUNCTION. APPOINTED MAY 14, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Walter L. Farmer Enlargement Ditch.....	Kaunah creek.....	Dec. 21, 1891	Dec. 11, 1891	3.00	Walter L. Farmer
The Spring Reservoir Ditch.....	Springs.....	Jan. 18, 1892	July 27, 1886	12.00	Norman J. Krusen
The John Goldsby North East Creek Ditch.....	East creek.....	Jan. 28, 1892	Dec. 5, 1891	10.00	John Goldsby
The Welsh Ditch.....	Coon creek.....	Jan. 30, 1892	Oct. 28, 1890	3.00	David Welsh
The West Salt Creek Ditch.....	West Salt creek.....	Feb. 12, 1892	Dec. 1, 1891	54.00	Addis E. Hayes <i>et al.</i>
The Bieser Ditch.....	Bieser creek.....	Feb. 13, 1892	April 1, 1888	2.88	Joseph Bieser
The Knowles Ditch.....	Waste and springs.....	Feb. 13, 1892	June 1, 1889	1.44	Chas. R. Sieber
The Enlargement No. 2 Park View Ditch.....	Cottonwood and Bull creeks.....	Feb. 13, 1892	Dec. 31, 1890	9.00	W. H. Monroe
The Shaw Ditch.....	Plateau creek.....	Feb. 13, 1892	Mar. 15, 1890	3.00	Wm. F. Shaw
The Overland Ditch.....	Plateau creek.....	Feb. 13, 1892	Dec. 16, 1890	6.00	Joseph E. Barker and Eugene Fonda
The Enlargement of Snipes Ditch.....	Cottonwood creek.....	Feb. 13, 1892	April 28, 1891	6.75	Chas. McKinney
The Lost Time Ditch.....	Plateau creek.....	Feb. 13, 1892	April 28, 1891	4.32	Oliver S. Williams

The Hoosier Ditch.....	Feb. 13, 1892	May 22, 1891	20.16	J. S. Griffith
The Avoca Orchards Ditch.....	Feb. 13, 1892	July 1, 1891	6.00	H. B. Johnson <i>et al.</i>
The Dandy Ditch.....	Feb. 13, 1892	Sept. 1, 1891	1.44	Herschel Sonner
The Park Creek Ditch.....	Feb. 13, 1892	Sept. 7, 1891	5.76	Geo. M. Gibson and J. W. Campbell
The Steele Ditch.....	Feb. 29, 1892	Feb. 20, 1892	3.00	Herschel Sonner <i>et al.</i>
The John Stevens Ditch.....	May 20, 1892	April 10, 1892	6.65	John W. Stevens
The Downing North Fork Ditch	June 3, 1892	April 22, 1892	1.44	William C. Downing
The Hard Scabble Ditch.....	June 3, 1892	Feb. 13, 1888	6.00	William Hughes
The Dandy Ditch.....	June 3, 1892	Mar. 7, 1892	1.50	Herschel Sonner
The Wilcox Ditch No. 1.....	June 3, 1892	April 2, 1892	6.00	J. G. Wilcox
The Wilcox Ditch No. 2.....	June 3, 1892	April 2, 1892	6.00	J. G. Wilcox
The Voge Irrigating Ditch, En- largement of Upper Salt Wash Ditch.....	June 4, 1892	Mar. 18, 1892	7.88	C. Elisah Voge
The Enlargement of the Cook Irrigating Ditch.....	June 9, 1892	Mar. 14, 1892	4.00	Lelon J. Crosier
The Alta Ditch.....	June 14, 1892	May 16, 1892	14.40	George Smith <i>et al.</i>
The G. & L. Ditch.....	June 14, 1892	Mar. 21, 1892	579.48	Henry C. Long <i>et al.</i>
The Roatcap Extension of the Goldsmith Ditch.....	June 22, 1892	April 13, 1892	24.80	D. S. Roatcap
The Jackson Ditch.....	June 25, 1892	May 1890	6.80	John Jackson
The Golden Age Ditch.....	June 28, 1892	May 1, 1890	8.40	John McGetrick and Megis J. Morris
Plateau creek.....				
Grand river.....				
Dandy creek.....				
Park creek.....				
Popa creek.....				
Stevens creek.....				
{ North Fork of Kannah creek }				
Plateau creek.....				
Dandy creek.....				
Indian creek.....				
Deer creek.....				
East Salt creek.....				
Kimball creek.....				
Grand river.....				
White Water creek.....				
Dry creek.....				
Wallace creek.....				
{ Clear Water and Big creek }				

STATEMENT CONCERNING DITCHES—Concluded.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Rio Dominquez Ditch	Rio Dominquez ck	June 28, 1892	Feb. 29, 1892	10.00	Joseph Reynolds
The Cliff Lake Ditch	Reservoir creek	July 25, 1892	May 14, 1892	4.00	George B. Pickett and John R. Pickett
The Enlargement of the Pioneer and White Water Ditch No. 1	White Water creek	July 25, 1892	May 14, 1892	8.64	George B. Pickett and John R. Pickett
The Enlargement of the Pioneer and White Water Ditch No. 2	White Water creek	July 25, 1892	May 14, 1892	8.64	George B. Pickett and John R. Pickett
The Pine Mesa Ditches	Big creek	Aug 31, 1892	June 5, 1892	12.00	J. R. Snyder
The Park View and Bull Creek Enlargement Ditch	Cottonwood and Bull creeks	Sept. 8, 1892	Aug 29, 1892	13.00	Solomon Myers
The Coulter Ditch	{ Gulch tributary } { to Kannah creek }	Sept. 16, 1892	July 22, 1892	1.00	R. R. Coulter
The Lake Park Ditch	White Water creek	Sept. 16, 1892	1892	12.00	H. C. Hall and G. W. Hall
The Gavin Ditch	Waste and seepage	Sept. 16, 1892	May 1, 1890	4.00	Sallie J. Gavin
The J. C. DeGroot Enlargement of the Kannah Creek Extension Ditch	Kannah creek	Sept. 16, 1891	June 1, 1891	14.00	J. C. DeGroot
The Grand Mesa Reservoir Ditch	Kannah creek	Sept. 16, 1892	Aug. 17, 1891	8.00	W. J. Ponsford

The Garmon Independent Ditch	Big Salt wash	Sept. 16, 1892	April 20, 1892	Indefinite	A. R. Garmon
The Dry Lake Reservoir Ditch	Spring creek	Nov. 12, 1892	March 5, 1892	31.00	J. E. Ellison <i>et al.</i>
The Kannah Creek Extension } Waste Water Ditch	Waste and seepage	Nov. 25, 1892	Aug. 15, 1892	9.00	James R. Snyder

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 42, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1899, TO DECEMBER 1, 1902.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of Ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Mesa Creek Reservoir	Mesa creek	Mesa Creek canal	Mar. 2, 1891	Sept. 20, 1890	14,374,800	{ The Mesa creek Reservoir and Canal Company.
The Spring Canon Reservoir	Spring canon	Spring Canon d'h	Mar. 9, 1891	Mar. 2, 1891	4,950,000	Charles P. McCary
The Pedro Reservoir	Youngs creek	Built on stream	Oct. 29, 1891	July 21, 1891	4,790,000	John J. Travis
The G. & L. Reservoir No. 1	Whitewater creek	G. & L. ditch	Nov. 25, 1891	Nov. 14, 1891	90,000,000	H. C. Long <i>et al.</i>
The G. & L. Reservoir No. 2	Whitewater creek	G. & L. ditch	Nov. 25, 1891	Nov. 14, 1891	190,000,000	H. C. Long <i>et al.</i>
The John Goldsby North-East Creek Reservoir	East creek	{ John Goldsby North-East Creek ditch }	Jan. 28, 1892	Dec. 5, 1891	9,000,000	John Goldsby
The Scales Reservoir	Kannah creek	Built on stream	Feb. 13, 1892	Aug. 8, 1891	16,266,000	L. N. Farner <i>et al.</i>
The Haas Reservoir	Kannah creek	Built on stream	Feb. 13, 1892	Aug. 8, 1891	9,000,000	Ed. Haas <i>et al.</i>
The John W. Stevens Reservoir	Stevens creek	{ John W. Stevens ditch }	May 20, 1892	April 10, 1892	1,568,000	John W. Stevens
The G. & L. Reservoir	Whitewater creek	G. & L. Ditch	June 7, 1892	Mar. 21, 1892	435,600,000	Henry C. Long <i>et al.</i>
The Cliff Lake Reservoir	Reservoir creek	Cliff Lake ditch	July 25, 1892	May 14, 1892	4,163,400	George B. and John R. Pickett
The Dry Lake Reservoir	Spring creek	Dry Lake reservoir	Nov. 12, 1892	Mar. 5, 1892	4,000,000	J. E. Ellison <i>et al.</i>

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 45, SHOWING THE MODIFICATION IN THE DECREES GOVERNING APPROPRIATIONS IN SAID DISTRICT,
FROM THE CERTIFIED COPY FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREES.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet previously appropriated in district.	Order of priority in district.
The Clausen & Byrne Ditch	Porcupine creek	Mar. 1, 1883	1.17			6
The Rustler Ditch	Porcupine creek	Mar. 1, 1883	1.17			6
The Clausen Ditch	Beaver creek	Mar. 30, 1883	1.37			8
The Starkie Ditch	Beaver creek	Mar. 30, 1883	1.37			8
The O'Connor Ditch	Porcupine creek	Sep. 1, 1885	2.00			36 A
The Dennis & Barton Ditch	Divide creek	Mar. 1, 1887	2.40			65 A

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 45, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—WATER COMMISSIONER, PETER CHURCHFIELD, CRESTED BUTTE. APPOINTED JULY 21, 1890.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Cram Enlargement of the Hunter & Gant Ditch.....	West Fork Mamm creek.....	Jan. 19, 1891	July 18, 1885	9.00	Amos S. Ramsey
The Rising Sun Ditch.....	Grand river.....	Jan. 26, 1891	Dec. 5, 1883	200.00	Lawrence Sweeney <i>et al.</i>
The Rising Sun Ditch Enlargement.....	Grand river.....	Jan. 26, 1891	Last of October, 1886 }	710.00	Lawrence Sweeney <i>et al.</i>
The Swan Spring and Waste Water Ditch.....	A gulch.....	Mar. 18, 1891	May 1, 1889	2.00	Joseph S. Swan
The Baker Ditch.....	Wallace creek.....	June 12, 1891	June, 1886	3.00	Milton D. Baker
The Swan Enlargement of the Battlement Ditch.....	Battlement creek.....	July 3, 1891	May 21, 1891	14.50	Joseph S. Swan
The Daniel Flannery Ditch.....	Three Mile creek.....	July 22, 1891	Dec. 15, 1885	3.50	Thomas Flannery
The Divide Creek Ditch.....	Divide creek.....	Oct. 10, 1891	.....	.....	.....
The Hydropathic Ditch.....	West branch Mamm creek.....	Nov. 18, 1891	Aug. 1, 1891	6.00	Isaac N. Grove
The Spring Ditch.....	Mamm creek.....	Nov. 30, 1891	Not given.....	1.50	Bert Ellis

The Frank Dyer Ditch	Seepage and waste	Dec. 26, 1891	Sept. 8, 1891	110.00	Frank M. Dyer
The Doc. Grove Ditch	Seepage and waste	Jan. 18, 1891	Sept. 3, 1891	2.66	Isaac N. Grove
The Spring Branch Ditch	Divide creek	Jan. 21, 1891	May 30, 1884	3.50	Jasper Reynolds
The Divide Creek Ditch	Divide creek	Jan. 21, 1891	April 15, 1886	3.50	Jasper Reynolds
The Little Crann Ditch	Waste and seepage	Feb. 18, 1892	Sept. 7, 1887	1.17	Charles Crann
The Spring Ditch	Springs	Mar. 3, 1892	Feb. 27, 1892	1.68	J. J. Clauson
The Homestake Ditch	Wallace creek	April 14, 1892	Oct. 8, 1885	6.00	Charles L. Sawyer
The Sawyers Grand River Ditch	Grand river	April 14, 1892	Spring, 1892	6.00	Phillip Sawyer
The Jonathan Grant Ditch	Quaking creek	June 23, 1892	June 4, 1891	9.00	Jonathan Grant
The Allison Ditch	Beaver creek	Aug. 9, 1892	April 10, 1890	16.66	Charles Gleason
The Randle Ditch	Dry creek	Aug. 9, 1892	May 25, 1892	10.00	James F. Randle
The A. G. Ditch	Beaver creek	Sept. 26, 1892	Sept. 11, 1891	14.60	A. G. Anderson
The Lee Enlargement of the J. A. Clark Ditch	Beaver creek	Nov. 14, 1892	Oct. 1, 1892	6.17	Albert Lee
The Dennis Enlargement and Extension of Divide Ck Ditch	Divide creek	Nov. 28, 1892	May 10, 1889	3.00	John P. Dennis

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 45, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream conveying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Hydropathic Reservoir.....	{ West Branch of Mamun creek .. }	Hydrapathic d'h	Nov. 18, 1891	Aug. 1, 1891	1,000,000	Isaac N. Grove
The Vaughn Reservoir.....	Mamun creek.....	Enterprise ditch	April 25, 1892	Mar. 14, 1892	7,000,000	William Cramm
The Ida Lux Reservoir.....	Mamun creek.....	Enterprise ditch	April 25, 1892	Mar. 15, 1892	2,000,000	Peter and Ida Lux
The Spring Gulch Reservoir....	Spring gulch.....	Built on gulch...	May 13, 1892	April 17, 1892	3,000,000	William Chadwick

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO 50, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in the State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Serrells Lateral of Ennis } Ditch	Troublesome creek	Mar. 6, 1891	June 10, 1890	2.00	George Serrell
The West Side Ditch	-----	Mar. 6, 1891	July 1, 1888	2.30	George Serrell
The Pleasant View Ditch	Troublesome creek	Mar. 6, 1891	May 15, 1890	8.00	George Serrell <i>et al.</i>
The Big Spring Ditch	Troublesome creek	May 13, 1891	May 13, 1891	10.00	Urban Bickley, (one statement)
The Bickley Ditch	Troublesome creek	May 13, 1891	May 23, 1882	20.00	Urban Bickley, (one statement)
The Troublesome Ditch	North Fork of Troublesome cr'k }	May 20, 1891	May 13, 1891	55.00	Urban Bickley <i>et al.</i>
The Zwahlen Ditch	Troublesome creek	Aug. 2, 1892	May 1889	9.00	Peter Zwahlen
The Cliff Ditch	Troublesome creek	Sept. 21, 1892	May 19, 1886	29.00	C. H. Johnson <i>et al.</i>
The Six Diamond Ditch	Troublesome creek	Sept. 21, 1892	May 18, 1887	12.00	C. A. Johnson and Gustaf Pearson

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 51, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The North Ditch	Grand River	Jan. 7, 1891	Sept. 8, 1890	357.48	The Larimer Water Supply Company
The South Ditch	Grand River	Jan. 7, 1891	Sept. 15, 1890	183.26	The Larimer Water Supply Company
The Telford Ditch	Pole creek	Oct. 1, 1892	August 1890	9.00	G. H. Church
The Carl Just Ditch	Pole creek	Oct. 14, 1892	Oct. 1, 1892	200 inches	Carl Just

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 52, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet previously appropriated in the district.	Order of priority in district.
The Wheeler Ditch.....	Henry creek.....	May 1, 1883	2.00	-----	-----	1
The McCoy No. 1 Ditch.....	Sheephorn creek.....	May 1, 1883	1.20	-----	2.00	2
The Wilmot Ditch.....	Cottonwood creek.....	Dec. 20, 1883	4.00	-----	3.20	3
The Osage Ditch.....	Sheephorn creek.....	July 1, 1885	2.00	-----	7.20	4
The Bear Creek Ditch.....	Bear creek.....	May 1, 1886	.40	-----	9.20	5
The Sava Creek Ditch.....	Lava creek.....	May 15, 1886	.20	-----	9.60	6
The Dry Park Ditch.....	Castle creek.....	Mar. 20, 1887	4.20	-----	9.80	7
The Hartman Ditch.....	Sheep Mountain creek.....	April 20, 1887	3.00	-----	14.00	8
The Guzler Ditch.....	Sheephorn creek.....	May 1, 1887	2.80	-----	17.00	9
The Harvey Ditch.....	Sheephorn creek.....	May 15, 1887	2.00	-----	19.80	10
The McCoy No. 2 Ditch.....	Sheephorn creek.....	June 1, 1887	1.20	-----	21.80	11

STATEMENT CONCERNING DITCHES.—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in district.	Order of priority in district.
The Guzler Lake Ditch	Lake Guzel	June 30, 1887	.80	-----	23.00	12
The Wilnot Ditch (by purchase)	Cottonwood creek	Nov. 7, 1887	1.80	5.80	23.80	13
The Smalley Ditch	Cottonwood creek	Apr. 15, 1888	1.70	-----	25.60	14
The Rundell No. 3 Ditch	Little Cottonwood creek	May 1, 1888	.10	-----	27.30	15
The South Piney Ditch	Piney creek	July 1, 1888	1.00	-----	27.40	16
The North Piney Ditch	Piney creek	July 1, 1888	1.20	-----	28.40	17
The Rundell Ditch	Cottonwood creek	Aug. 1, 1888	1.80	-----	29.60	18
The Pruett No. 2 Ditch	Cottonwood creek	May 1, 1889	.40	-----	31.40	19
The Pruett No. 1 Ditch	Cottonwood creek	May 1, 1889	1.60	-----	31.80	20
The Hoyt Ditch	Sheephorn creek	May 1, 1889	.96	-----	33.40	21
The Hog Eye Ditch	Sheephorn creek	June 15, 1889	1.60	-----	34.36	22

The Castle Creek Ditch.....	Castle creek.....	Aug. 29, 1889.....	3.20.....	35.96.....	23.....
The Ashlock Ditch.....	Piney creek.....	Aug. 27, 1889.....	1.80.....	39.16.....	24.....
The Kuhn Ditch.....	Kuhn creek.....	Aug. 31, 1889.....	3.20.....	40.96.....	25.....
The Graham Ditch.....	Cottonwood creek.....	April 1, 1890.....	.80.....	44.16.....	26.....
The Smalley Creek Ditch.....	Cottonwood creek.....	April 15, 1890.....	1.00.....	44.96.....	27.....
The McPhee Ditch.....	Sheephorn creek.....	May 1, 1890.....	3.30.....	45.96.....	28.....
The Hartman Ditch, first enlargement.....	Sheep Mountain creek.....	May 7, 1890.....	1.40.....	49.26.....	29.....
The Willow Creek Ditch.....	Willow creek.....	Sept. 10, 1890.....	.60.....	50.66.....	30.....
The Guzler No. 2 Ditch.....	Sheephorn creek.....	Sept. 10, 1890.....	.20.....	51.26.....	31.....
The Rundell No. 2 Ditch.....	Sheephorn creek.....	Sept. 11, 1890.....	.16.....	51.46.....	32.....
The Mather Ditch.....	Sheephorn creek.....	Sept. 11, 1890.....	2.50.....	51.62.....	33.....
The Rundell No. 4 Ditch.....	Little Cottonwood creek.....	Sept. 11, 1890.....	.50.....	54.12.....	34.....
The J. L. Ditch.....	Henry creek.....	Sept. 12, 1890.....	1.50.....	54.62.....	35.....
Total Deeded in District.....	.....	.....	.....	56.12.....	.....

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 53, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The Stewart Irrigating Ditch.....	Grand river.....	Aug. 15, 1882	2.40	-----	-----	1
The Clyde Ditch.....	Egeria creek.....	April 20, 1883	1.60	-----	2.40	1 A
The Sutton No. 1 Ditch.....	King creek.....	May 30, 1883	2.30	-----	4.00	2
The Cedar Creek No. 1 Ditch.....	Cedar creek.....	June 25, 1883	2.50	-----	6.30	3
The Idlewild Ditch.....	Toponas creek.....	July 1, 1883	3.00	-----	8.80	4
The John Thomas Ditch.....	Egeria creek.....	July 3, 1883	4.00	-----	11.80	5
The Moore No. 1 Ditch.....	Cabin creek.....	Aug. 15, 1883	1.00	-----	15.80	6
The Link Ditch.....	Sunnyside creek.....	Sept. 1, 1883	.20	-----	16.80	7
The Sanders Ditch.....	Sunnyside creek.....	Mar. 31, 1884	3.20	-----	17.00	9
The Whiteside No. 1 Ditch.....	Cabin creek.....	April 1, 1884	.30	-----	20.20	10
The Raven's Nest Ditch.....	Egeria creek.....	July 20, 1884	4.00	-----	20.50	11
The Cabin Creek Ditch.....	Cabin creek.....	Aug. 25, 1884	2.50	-----	24.50	12

The Derby Ditch	Derby creek	Sept. 4, 1884	24.00	27.00	13
The Oak Grove Ditch	Cabin creek	Sept. 1, 1884	6.50	51.00	13 A
The Little Dry Gulch Ditch	Little Dry Gulch creek	Nov. 4, 1884	1.40	57.50	14
The Sunnyside Roberts Ditch	Sunnyside creek	Mar. 20, 1885	2.00	58.90	15
The Merriman Ditch	Sunnyside creek	Mar. 23, 1885	2.00	60.90	16
The Cedar Creek No. 2 Ditch	Cedar creek	April 15, 1885	2.70	62.90	17
The Buffalo Head Ditch	King creek	April 15, 1885	5.00	65.60	18
The Grover Cleveland Ditch	King ditch	April 15, 1885	7.80	70.60	19
The Whiteside No. 2 Ditch	Cabin creek	April 15, 1885	.04	78.40	20
The Sunnyside Ditch	Sunnyside creek	April 30, 1885	3.20	78.44	22
The Sutton No. 1, first enlargement	King creek	May 15, 1885	1.60	81.64	22 A
The Raspberry Gulch Ditch	Raspberry Gulch creek	May 15, 1885	.80	83.24	23
The Merrimac Ditch	Sunnyside creek	June 21, 1885	2.80	84.04	24
The Baxter Ditch	Sunnyside creek	June 29, 1885	3.20	86.84	25
The Sanders (by purchase)	Sunnyside creek	June 30, 1885	1.20	90.04	26
The Sutton No. 2 Ditch	Sutton creek	July 11, 1885	2.60	91.24	27
The McKeen No. 1 Ditch	McKeen creek	Aug. 15, 1885	.50	93.84	28
The McKeen No. 2 Ditch	McKeen creek	Aug. 15, 1885	2.00	94.34	29
The Murphy No. 1 Ditch	Yarmany creek	Mar. 15, 1886	1.60	96.34	30
The Elliott No. 2 Ditch	Rock creek	April 1, 1886	.12	97.94	31
The Hart No. 3 Ditch	Rock creek	May 1, 1886	.40	98.06	32
The Dawson Ditch	Sunnyside creek	May 1, 1886	3.60	98.46	33

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district.
The S. D. Ditch.....	Egeria creek.....	May 8, 1886.....	3.00.....	.....	102.06.....	34.....
The Allen No. 1 Ditch.....	Mason creek.....	May 15, 1886.....	.50.....	.....	105.06.....	35.....
The Elliott Ditch.....	Rock creek.....	May 20, 1886.....	2.70.....	.....	105.56.....	36.....
The Creamery Ditch.....	King creek.....	May 20, 1886.....	1.20.....	.....	108.26.....	37.....
The North Egeria Ditch.....	Egeria creek.....	June 10, 1886.....	3.20.....	.....	109.46.....	38.....
The Conger Ditch.....	Conger creek.....	June 15, 1886.....	8.80.....	.....	112.66.....	39.....
The Stewart No. 1 Ditch.....	Stewart creek.....	June 15, 1886.....	.10.....	.....	121.46.....	40.....
The Stewart No. 2 Ditch.....	Stewart creek.....	June 15, 1886.....	.60.....	.....	121.56.....	41.....
The Stewart No. 3 Ditch.....	Stewart creek.....	June 15, 1886.....	.04.....	.....	122.16.....	42.....
The Stewart No. 4 Ditch.....	Stewart creek.....	June 15, 1886.....	.20.....	.....	122.20.....	43.....
The Elk Creek Ditch.....	Elk creek.....	Dec. 22, 1886.....	2.00.....	.....	122.40.....	44.....
The Dempsey No. 1 Ditch.....	Ohio creek.....	Mar. 4, 1887.....	.80.....	.....	124.40.....	45.....
The Tucker No. 2 Ditch.....	Haak creek.....	Mar 15, 1887.....	.30.....	.....	125.20.....	46.....
The Stewart Irrigating Ditch (by purchase).....	Grand river.....	Mar. 20, 1887.....	.70.....	3.10.....	125.50.....	47.....
The Maxwell Ditch.....	Rock creek.....	Apr. 1, 1887.....	.40.....	.....	126.20.....	48.....

The Musgrave Ditch.....	April 1, 1887	1.20	-----	126.60	49
The Waste Waters Ditch.....	April 5, 1887	1.00	-----	127.80	50
The Maxwell No. 2 Ditch.....	April 15, 1887	.40	-----	128.20	51
The Kenney No. 1 Ditch.....	April 27, 1887	.20	-----	128.60	52
The Willow Ditch.....	April 30, 1887	4.40	-----	128.80	53
The Hart No. 1 Ditch.....	May 1, 1887	1.20	-----	133.20	54
The Hart No. 2 Ditch.....	May 1, 1887	.40	-----	134.40	55
The Kenney No. 2 Ditch.....	May 5, 1887	.24	-----	134.80	56
The Cyrus No. 1 Ditch.....	May 6, 1887	.20	-----	135.04	57
The Skinner Ditch.....	May 10, 1887	.70	-----	135.24	58
The Allen No. 2 Ditch.....	May 15, 1887	.30	-----	135.94	59
The Haak No. 2 Ditch.....	May 15, 1887	.50	-----	136.24	60
The Allen No. 3 Ditch.....	May 15, 1887	.12	-----	136.74	61
The Deep Creek Ditch.....	June 1, 1887	1.80	-----	136.86	62
The Simons Ditch.....	June 10, 1887	.10	-----	138.66	63
The Spring Ditch.....	July 1, 1887	.20	-----	138.76	64
The Oak Knoll Ditch.....	July 1, 1887	1.20	-----	138.96	65
The Grand River Land and Cattle Company Ditch.....	Sept. 29, 1887	18.40	-----	140.16	66
The Kenney No. 3 Ditch.....	Oct. 20, 1887	1.20	-----	158.56	67
The Horn No. 1 Ditch.....	Nov. 1, 1887	1.30	-----	159.76	68
The Horn No. 2 Ditch.....	Nov. 1, 1887	.20	-----	161.06	69
The Stewart Irrigating Ditch, first enlargement.....	Mar. 15, 1888	2.00	4.40	161.26	70

STATEMENT CONCERNING DITCHES.—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	Order of priority in district.
The Snodgrass & Manners Ditch	Horse creek	April 1, 1888	2.00	—	163.26	71
The Tuke No. 1 Ditch	Horse creek	April 4, 1888	.80	—	165.26	72
The Tuke No. 2 Ditch	Horse creek	April 4, 1888	.12	—	166.06	73
The Tuke No. 3 Ditch	Horse creek	April 4, 1888	.32	—	166.18	74
The Tuke No. 4 Ditch	Horse creek	April 4, 1888	.16	—	166.50	75
The George McClusky Ditch	Willow and Horse creeks	April 15, 1888	.50	—	166.66	76
The Big Mesa Ditch	Sunnyside creek	April 15, 1888	.60	—	167.16	77
The Correll Ditch	Cabin creek	April 15, 1888	.20	—	167.76	78
The Hooper Ditch	Derby creek	May 1, 1888	9.00	—	167.96	79
The Toponas-Elliott No. 2 Ditch	Toponas creek	June 1, 1888	1.20	—	176.96	81
The Elliott No. 1 Ditch	Wright creek	June 10, 1888	.30	—	178.16	82
The Yarmany Park Ditch	Yarmany creek	July 3, 1888	4.80	—	178.46	83
The Cabin Creek No. 3 Ditch	Cabin creek	July 25, 1888	.40	—	183.26	84
The Summit Ditch	Antelope creek	July 30, 1888	.20	—	183.66	85
The Nelson Ditch	Horse creek	Oct. 10, 1888	1.80	—	183.86	86

The S. D. Ditch, first enlargement.....	Egeria creek.....	Oct. 13, 1888.....	5.40.....	185.66.....	87
The Russell No. 1 Ditch.....	Red Dirt creek.....	Nov. 25, 1888.....	.80.....	191.06.....	88
The Antelope Ditch.....	Antelope creek.....	Jan. 13, 1889.....	.80.....	191.86.....	89
The Red Dirt Ditch.....	Red Dirt creek.....	Feb. 14, 1889.....	1.50.....	192.66.....	90
The McClusky No. 1 Ditch.....	Horse creek.....	Feb. 14, 1889.....	.60.....	194.16.....	91
The McClusky No. 2 Ditch.....	Horse creek.....	April 1, 1889.....	.20.....	194.76.....	92
The Irrigating Ditch No. 2 Ditch.....	Sheep Canon creek.....	April 10, 1889.....	.80.....	194.96.....	93
The Big Mesa Ditch, first enlargement.....	Sunnyside creek.....	April 15, 1889.....	1.20.....	195.76.....	94
The Oak Knoll Ditch, (purchase).....	Antelope creek.....	April 30, 1889.....	.20.....	196.96.....	95
The Armour Ditch.....	Egeria creek.....	May 1, 1889.....	.80.....	197.16.....	96
The Elliott Ditch, (purchase).....	Rock creek.....	May 15, 1889.....	.50.....	197.96.....	97
The Roberts Ditch.....	Sunnyside creek.....	June 1, 1889.....	.30.....	198.46.....	98
The Gruner No. 1 Ditch.....	Jim creek.....	June 5, 1889.....	1.00.....	198.76.....	99
The Trail Ditch.....	Trail creek.....	June 17, 1889.....	3.20.....	199.76.....	100
The Morse Ditch.....	Egeria creek.....	July 13, 1889.....	1.00.....	202.96.....	101
The Rogers Ditch.....	Little Dry Gulch creek.....	Aug. 5, 1889.....	1.80.....	203.96.....	102
The Deep Creek Ditch, (purchase).....	Deep creek.....	Sept. 18, 1889.....	2.00.....	205.76.....	103
The Rock Creek Ditch.....	Rock creek.....	April 1, 1890.....	1.60.....	207.76.....	105
The Big Mesa Ditch, second enlargement.....	Sunnyside creek.....	April 15, 1890.....	2.80.....	209.36.....	106
The Sanders Ditch, first enlargement.....	Sunnyside creek.....	April 15, 1890.....	.06.....	212.16.....	107
The Tucker No. 1 Ditch.....	Hank creek.....	April 20, 1890.....	1.20.....	212.22.....	108
The Allen No. 3 Ditch, first enlargement.....	Sheep creek.....	May 1, 1890.....	.12.....	213.42.....	109

STATEMENT CONCERNING DITCHES.—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second previously appropriated in the district.	Order of priority in district.
The No Name Ditch.....	Egeria creek.....	May 12, 1890	.60	-----	213.54	110
The Tucker No. 3 Ditch.....	Haak creek.....	May 15, 1890	.80	-----	214.14	111
The Pass Creek Ditch.....	Pass creek.....	May 15, 1890	.10	-----	214.94	112
The Dry Ditch.....	Sunnyside creek.....	May 20, 1890	1.20	-----	215.04	113
The Elliott No. 3 Ditch.....	Rock creek.....	May 20, 1890	.50	-----	216.24	114
The Nelson Ditch, first enlargement.....	Horse creek.....	June 13, 1890	1.00	2.80	216.74	115
The Cabin Creek No. 2 Ditch.....	Cabin creek.....	June 15, 1890	.60	-----	217.74	116
The Stewart No. 1 Ditch, second appropriation.....	Stewart creek.....	June 25, 1890	1.50	1.60	218.34	117
The Frederick Ditch.....	Sweetwater creek.....	June 27, 1890	1.00	-----	219.84	118
The Dempsey No. 2 Ditch.....	McKeen creek.....	June 28, 1890	.60	-----	220.84	119
The Gruner No. 2 Ditch.....	Jim creek.....	June 28, 1890	.20	-----	221.44	120
The Riland Ditch.....	Haak creek.....	June 28, 1890	1.40	-----	221.64	121
The Gruner No. 1 Ditch, first enlargement.....	Jim creek.....	June 28, 1890	1.00	-----	223.04	122
The Cyrus No. 2 Ditch.....	Mason creek.....	June 30, 1890	.60	-----	224.04	123
The Cyrus No. 3 Ditch.....	Mason creek.....	June 30, 1890	.40	-----	224.64	124

The Wilson Gulch Ditch.....	Wilson Gulch creek.....	July 3, 1890	.80	-----	225.04	125
The Dome Ranch Ditch.....	Cedar creek.....	July 8, 1890	1.00	-----	225.84	126
The Tanner Ditch.....	Sunnyside creek.....	July 9, 1890	1.20	-----	226.84	127
The P. K. Ditch.....	King creek.....	July 14, 1890	3.20	-----	228.04	128
The Highwater Ditch.....	Egeria creek.....	July 16, 1890	3.20	-----	231.24	129
The Wilson Ditch.....	Egeria creek.....	July 16, 1890	2.00	-----	234.44	130
The J. M. C. Ditch.....	Spring creek.....	July 17, 1890	2.40	-----	236.44	131
The Highland Ditch.....	Toponas creek.....	July 18, 1890	5.60	-----	238.84	132
The Oak Knoll Ditch, first enlargement.....	Antelope creek.....	July 21, 1890	1.00	2.40	244.44	133
The Spruce Grove Ditch.....	Antelope creek.....	July 23, 1890	1.60	-----	245.44	134
The Russell No. 2 Ditch.....	Red Dirt creek.....	July 24, 1890	1.60	-----	247.04	135
The Horn No. 3 Ditch.....	Rock creek.....	July 24, 1890	.94	-----	248.64	136
The Middle Derby Ditch.....	Middle Derby creek.....	July 25, 1890	7.20	-----	249.58	137
The Murphy No. 2 Ditch.....	Yarnum creek.....	July 28, 1890	2.00	-----	256.78	138
The Sunnyside Roberts Ditch, second appropriation.....	Sunnyside creek.....	July 30, 1890	4.00	6.00	258.78	138 A
The Whiteside No. 2 Ditch, second appropriation.....	Cabin creek.....	July 30, 1890	2.36	2.40	262.78	139
The Whiteside No. 3 Ditch.....	Little Dry Gulch creek.....	Aug. 9, 1890	1.00	-----	265.14	140
The Elk Head Ditch.....	Egeria creek.....	Sept. 1, 1890	1.60	-----	266.14	141
Total decreed in District.....	-----	-----	-----	-----	267.74	-----

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 53, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—WATER COMMISSIONER, CHARLES M. MORRIS, TOPMAS, COLO. APPOINTED APRIL, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet	NAMES OF CLAIMANTS.
The Earl Ditch	Rigeria creek	Jan. 15, 1892	July 7, 1891	.64	S. D. Wilson
The Wright Waste Water Ditch..	{ Waste seepage } { and springs.... }	April 4, 1892	Mar. 14, 1892	8.00	W. M. Wright

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 59, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Castle High Line Ditch	Castle creek	Dec. 5, 1890	Nov. 10, 1890	40.00	D. S. McGlashan and G. W. Howe
The Squirrel Creek Ditch	Squirrel creek	Dec. 5, 1890	Nov. 10, 1890	4.00	D. S. McGlashan and G. W. Howe
The Thos. N. Estes Irr'g Ditch	Ohio creek	Jan. 5, 1891	Sept. 1, 1883	18.00	Thomas W. Estes
The Bourne Ditch	Carbon creek	Jan. 2, 1891	June 23, 1886	9.00	Emma P. Patch <i>et al.</i>
The Marshall Ditch No. 1	Gunnison river	Jan. 13, 1891	1890	60.00	J. Marshall <i>et al.</i>
The Marshall Ditch No. 2	Gunnison river	Jan. 13, 1891	Dec. 8, 1890	40.00	J. Marshall <i>et al.</i>
The Gus Biebel Ditch	Ohio creek	Jan. 13, 1891	Dec. 18, 1890	9.00	Lonisa Biebel
The Haymaker Ditch	Lost Canon creek	Jan. 13, 1891	Nov. 12, 1890	20.00	J. A. Haymaker
The Gleason Irrigating Ditch	Ohio creek	Jan. 20, 1891	Jan. 22, 1891	36.00	Andrew B. Marston
The Thompson Irrigating Ditch	Antelope creek	May 13, 1891	Jan. 7, 1891	9.00	Thomas J. Thompson
The D. S. McGlashan Ditch	Carbon creek	Aug. 3, 1891	June 10, 1891	10.00	D. S. McGlashan
The Elmer Marshall Ditch No. 1	Gunnison river	Aug. 3, 1891	Apr. 15, 1891	10.00	Elmer Marshall
The Elmer Marshall Ditch No. 2	Gunnison river	Aug. 3, 1891	Apr. 15, 1891	10.00	Elmer Marshall
The Castleton Ditch	Carbon creek	Aug. 4, 1891	June 10, 1882	30.00	Joseph C. McKee <i>et al.</i>

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Gray Irrigating Ditch	Grays creek	Aug. 10, 1891	July 10, 1891	4.90	T. W. Gray
The Spring Creek Irrigating Ditch	Spring creek	Oct. 14, 1891	June 15, 1882	25.00	Charles E. Stevens <i>et al.</i>
The Gleason Irrigating Ditch	Ohio creek	Oct. 24, 1891	Oct. 22, 1891	36.00	Andrew B. Marston
The Bruce Ditch No. 1	Spring creek	Nov. 14, 1891	Nov. 20, 1883	33.00	Hiram T. Bruce
The Bruce Ditch No. 2	Spring creek	Nov. 14, 1891	Nov. 20, 1883	13.00	Hiram T. Bruce
The Wilson Gulch Ditch	{ Bear and Antelope gulches.	Dec. 7, 1891	Dec. 3, 1891	43.00	William Wilson
The Buckley Ditch	Ohio ditch.	Dec. 7, 1891	Nov. 30, 1891	45.00	William F. Buckley
The Frank Adams Ditch No. 2	Gunnison river	Dec. 7, 1891	Mar. 1883	28.60	Frank Adams
The Sunshine Irrigating Ditch	West Antelope c'k	May 20, 1891	May 20, 1891	4.64	E. D. Long
The Hope Resich Ditch	Carbon creek	June 1, 1892	May 6, 1892	27.00	C. Bourne and Hope Resich
The Smith & Wilson Ditch	Gunnison river	Sept. 8, 1892	Oct. 1, 1888	12.00	S. S. Wilson and George W. Smith
The Goyn & Morelock Ditch	Unnamed stream.	Oct. 20, 1892	July 1, 1892	10.00	F. W. Goyn and M. Morelock

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 60, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Adams Canal	Deep creek	Dec. 6, 1890	Oct. 15, 1890	88.00	John W. and F. E. Adams
The East Beaver Water Right and Ditch	{ East branch, East fork Main Beaver creek.	Dec. 23, 1891	Sept. 24, 1891	61.20	The Maturita Canal and Reservoir Company
The Lawson Ditch	{ Wadell and Prospect creeks.	Mar. 3, 1892	June 22, 1891	8.00	J. A. Lawson
The Thompson Ditch	Big Bear creek	April 29, 1892	June 26, 1891	11.00	Alex. Thompson
The Prospect Creek Ditch	Prospect creek	May 7, 1892	June 10, 1890	9.50	H. Kellock and L. L. Lasselle

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 61, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	No. on stream.	Order of priority in district.
The Goshorn No. 1 Ditch.....	Paradox creek.....	June 30, 1878	.75	-----	-----	1	1
The Sheek Ditch.....	Dolores river.....	May 31, 1879	1.00	-----	.75	1	2
The Illinois Ditch.....	Dolores river.....	April 15, 1880	3.30	-----	1.75	2	3
The Home Ditch.....	Dolores river.....	May 1, 1880	1.00	-----	5.05	3	4
The Italian Ditch.....	Dolores river.....	May 1, 1880	1.00	-----	6.05	4	5
The Moriarity Ditch.....	Dolores river.....	Dec. 31, 1880	1.00	-----	7.05	5	6
The Talbert Ditch.....	Talbert and Cottonwood creek tributaries of W. Paradox...}	Feb. 14, 1881	1.00	-----	8.05	2	7
The Huose & Sommers Ditch.....	Dolores river.....	Mar. 31, 1881	1.00	-----	9.05	6	8
The Bean Ditch.....	Dolores river.....	April 1, 1881	1.00	-----	10.05	7	9
The Burch & Longwill Ditch.....	Dolores river.....	April 30, 1881	1.00	-----	11.05	8	10
The George P. Moore Ditch.....	Dolores river.....	April 30, 1881	1.00	-----	12.05	9	11

The Neathery Ditch.....	Paradox creek.....	April 30, 1881	.90	-----	13.05	3	12
The Kuhlman Ditch.....	Dolores river.....	May 1, 1881	1.00	-----	13.95	10	13
The D. D. Williams Ditch.....	Dolores river.....	May 1, 1881	1.00	-----	14.95	11	14
The Aztec Ditch.....	Dolores river.....	May 1, 1881	1.00	-----	15.95	12	15
The Hammond & Clark Ditch.....	Dolores river.....	May 10, 1881	1.00	-----	16.95	13	16
The Lone Dome Ditch.....	Dolores river.....	Feb. 20, 1882	1.00	-----	17.95	14	17
The Stevens or Riley Watson Ditch.....	Springs.....	Mar. 31, 1882	1.75	-----	18.95	4	18
The Gould & Moriarty Ditch.....	Dolores river.....	May 15, 1882	1.00	-----	20.70	15	19
The Giorgetta Ditch.....	Dolores river.....	May 31, 1882	1.00	-----	21.70	16	20
The Royce & Risley Ditch.....	Lost Canon creek.....	July 22, 1882	1.00	-----	22.70	1	21
The Neathery No. 2 Ditch.....	Paradox creek.....	April 30, 1883	1.00	-----	23.70	5	22
The Dunham Ditch.....	Dolores river.....	May 31, 1883	1.00	-----	24.70	18	23
The Sebastian Tam Ditch.....	Dolores river.....	May 31, 1883	1.00	-----	25.70	19	24
The Prentiss Ditch.....	Paradox creek.....	May 31, 1883	1.00	-----	26.70	6	25
The E. C. Hamilton Ditch.....	Paradox creek.....	Oct. 5, 1883	1.00	-----	27.70	7	26
The W. D. Hamilton Private Ditch.....	Huff springs.....	Dec. 31, 1883	1.00	-----	28.70	8	27
The Swain Ditch.....	Paradox creek.....	Jan. 7, 1884	1.00	-----	29.70	9	28
The Galloway Ditch.....	Paradox creek.....	May 10, 1884	.30	-----	30.70	10	29
The Nyswoonger Ditch.....	Paradox creek.....	May 31, 1884	1.00	-----	31.00	11	30
The Goshorn No. 3 Ditch.....	Paradox creek.....	Nov. 30, 1884	.58	-----	32.00	12	31
The Leach Ditch.....	Paradox creek.....	Mar. 19, 1885	.90	-----	32.58	13	32
The Monument Rock Ditch.....	Dolores creek.....	June 1, 1885	1.00	-----	33.48	20	33

STATEMENT CONCERNING DITCHES—Concluded.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of appropriation.	Cubic feet of water per second decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet per second appropriated in the district.	No. on stream.	Order of priority in District.
The Valentine Ditch	Paradox creek	Aug. 23, 1885	1.00	—	34.48	14	34
The Colorado Consolidated Land and Water Company's Canals	Dolores river	Nov. 25, 1885	64.60	—	35.48	21	35
The Turkey Creek Ditch	Lost Canon creek	July 16, 1886	26.50	—	100.08	2	36
The Turkey Creek Ditch	Turkey creek	July 16, 1886	1.00	—	126.58	1	37
The Robinson Ditch	{ Arrow H'd, Little Ar- row H'd & Aztec spgs. }	Sept. 30, 1886	1.00	—	127.58	15	38
The Mary E. Young Ditch	Huff springs	May 1, 1887	.90	—	128.58	16	39
The Swain Ditch, second priority	Paradox creek	April 28, 1888	.33	1.33	129.48	17	40
The Waste Water No. 3 Ditch	Waste water	July 1, 1888	.33	—	129.81	1	41
The Wattler and Freeman Ditch	Turkey creek	Sept. 20, 1888	1.00	—	130.14	2	42
The Mary E. Young No. 2 Ditch	Paradox creek	April 1, 1889	.33	—	131.14	18	43
The Woodworth Ditch	Paradox creek	Nov. 7, 1889	.90	—	131.47	19	44
The Nafus Private Ditch	Paradox creek	Mar. 31, 1890	1.00	—	132.37	20	45
The Lyons Ditch	Dolores river	April 30, 1891	1.00	—	133.37	22	46

The D. D. Williams Ditch, second priority	Dolores river	Jan. 10, 1891	1.00	2.00	134.37	24	47
The House & Sommers Ditch, second priority	Dolores river	April 6, 1891	1.00	2.00	135.37	25	48
The Aztec Ditch, second priority	Dolores river	May 23, 1891	4.00	5.00	136.37	26	49
The Dunham & Johnson Ditch, second priority	Dolores river	June 1, 1891	1.00	2.00	140.37	27	50
The Lone Dome Ditch, second priority	Dolores river	June 4, 1891	1.20	2.20	141.37	28	51
The Italian Ditch, second priority	Dolores river	June 12, 1891	1.00	2.00	142.57	29	52
The Burch & Longwill Ditch, second priority	Dolores river	June 17, 1891	.50	1.50	143.57	30	53
The Hammond & Clark Ditch, second priority	Dolores river	June 17, 1891	1.00	2.00	144.07	31	54
The Moriarity Ditch, second priority	Dolores river	June 18, 1891	2.00	3.00	145.07	32	55
The Bean Ditch, second priority	Dolores river	June 24, 1891	.50	1.50	147.07	33	56
The Royce & Riley Ditch, second priority	Lost Canon creek	June 24, 1891	.30	1.30	147.57	3	57
Total decreed in District, giving definite dates					147.87		

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 61, SHOWING THE "CONSTRUCTIVE PRIORITIES" DECREED IN SAID DISTRICT, PREPARED FROM THE CERTIFIED COPY OF THE DECREE FURNISHED BY THE CLERK OF THE CIRCUIT COURT ISSUING SUCH DECREES.

NAME OF DITCH OR CANAL.	Stream from which water is taken.	Date of decree.	Cubic feet of water per second of time decreed to each priority.	Summation of decrees to each ditch or canal.	Cubic feet of water previously appropriated in district.	Order of priority in district
The Illinois Ditch, second priority	Dolores river	Feb. 1, 1892	1.70	5.00	147.87	58
The Sheek Ditch, second priority	Dolores river	Feb. 1, 1892	2.00	3.00	149.57	59
The Home Ditch, second priority	Dolores river	Feb. 1, 1892	1.00	2.00	151.57	60
The Moriarity Ditch, third priority	Dolores river	Feb. 1, 1892	.80	3.80	152.57	61
The House and Sommers Ditch, third priority	Dolores river	Feb. 1, 1892	.40	2.40	153.37	62
The Bean Ditch, third priority	Dolores river	Feb. 1, 1892	.90	2.40	153.77	63
The Burch and Longwill Ditch, third priority	Dolores river	Feb. 1, 1892	1.50	3.00	154.67	64
The George P. Moore Ditch, second priority	Dolores river	Feb. 1, 1892	.80	1.80	156.17	65
The Kuhlman Ditch, second priority	Dolores river	Feb. 1, 1892	.80	1.80	156.97	66
The D. D. Williams Ditch, third priority	Dolores river	Feb. 1, 1892	1.80	3.80	157.77	67
The Hammond and Clark Ditch, third priority	Dolores river	Feb. 1, 1892	2.60	4.60	159.57	68

The Lone Dome Ditch, third priority	Dolores river	Feb. 1, 1892	2.40	4.60	162.17	64
The Gould & Moriarity Ditch, second priority	Dolores river	Feb. 1, 1892	3.00	4.00	164.57	70
The Giorgetta Ditch, second priority	Dolores river	Feb. 1, 1892	.80	1.80	167.57	71
The Sebastian Tam Ditch, second priority	Dolores river	Feb. 1, 1892	.60	1.60	168.37	72
The Monument Rock Ditch, second priority	Dolores river	Feb. 1, 1892	1.00	2.00	168.97	73
The Colorado Consolidated Land and Water Company's Canals, } second priority	Dolores river	Feb. 1, 1892	1,235.40	1,300.00	169.97	74
Total decreed in District, including "constructive priorities"					1,469.97	

NOTE.—The above "constructive priorities" are conditioned on the "actual application" of the water thus decreed to "a beneficial use," due diligence" being prescribed as to such application.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 61, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.—COMMISSIONER, NEAL KING, MONTROSE, COLO. APPOINTED MAY 17, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The C. House Ditch.....	Dolores river.....	May 22, 1891	Spring 1881	Not given	Calvin House
The Turkey Ditch.....	{ North Fork of } { Lost Canon creek }	June 24, 1891	May 30, 1887	70.00	The Turkey Creek Ditch Company
The "vp" Ditch.....	Dolores river.....	Dec. 28, 1891	May 15, 1890	1.00	Mary L. Simon
The Falling Springs Ditch.....	Falling springs.....	Aug. 9, 1892	Nov. 1890	1.00	Neal King

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 61, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Leach Reservoir	Paradox creek	Leach ditch	Jan. 16, 1892	Oct. 16, 1891	28,422,900	M. L. Leach <i>et al.</i>

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 62, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Mergleman Ditch.....	Gunnison river.....	Dec. 6, 1890	Nov. 15, 1881	40.00	A. W. Mergleman
The Powderhorn Irrigating Ditch.....	Powderhorn creek.....	Dec. 23, 1890	May 21, 1886	17.00	A. M. Carpenter
The Pole Irrigating Ditch.....	Pole creek.....	Dec. 30, 1890	Oct. 3, 1890	2.50	Joseph Bess
The Bouviere Ditch.....	Willow creek.....	Feb. 4, 1891	July 3, 1886	9.30	Cyprien Bouviere
The Home Run Irrigating Ditch.....	Powderhorn creek.....	June 8, 1891	May 10, 1890	6.10	A. M. Carpenter
The Dry Powderhorn Irrigat- ing Ditch.....	Powderhorn creek.....	Sept. 25, 1891	Oct. 5, 1888	15.00	James McBride
The Pioneer Ditch.....	Tomichi creek.....	Oct. 6, 1891	1879	14.00	E. R. Hartman <i>et al.</i>
The Schnepf High Line Ditch.....	Powderhorn creek.....	Oct. 6, 1891	Sept. 17, 1891	21.00	Henry Schnepf <i>et al.</i>
The Thompson Irrigating Ditch.....	Elk creek.....	Oct. 22, 1891	April 15, 1880	17.50	J. N. Thompson
The Youmans Irrigating Ditch.....	Elk creek.....	Oct. 22, 1891	April 10, 1881	6.60	Vincent Youmans
The McMinn Irrigating Ditch.....	Big Cinnaron riv.....	Oct. 24, 1891	April 15, 1883	24.75	William P. McMinn
The Brownlee Irrigating Ditch.....	Brownlee creek.....	Nov. 18, 1891	April 16, 1882	5.00	W. C. Brownlee
The Allen Indian Creek Ditch.....	Indian creek.....	Nov. 18, 1891	Oct. 1, 1883	9.00	F. M. Mendenhall

The Upper North Ditch	Stumpy creek	Nov. 25, 1891	June 15, 1883	2.50	Peter Fitzpatrick
The Lower South Ditch	Stumpy creek	Nov. 25, 1891	June 15, 1883	2.50	Peter Fitzpatrick
The Schield-Brown Irr'ug Ditch	Big Cinnaron riv.	Nov. 25, 1891	June 1, 1883	5.00	Stillman, Schlidt <i>et al.</i>
The Branch of Collier Ditch	Big Cinnaron riv.	Nov. 25, 1891	June 1, 1883	Not Given	Stillman Schlidt <i>et al.</i>
The Collier Ditch	Little Cinnaron riv.	Nov. 25, 1891	May 1, 1889	64.50	Chas. U. Yohe <i>et al.</i>
The Discombe Nurse Cr'k Ditch	Nurse creek	Jan. 2, 1892	May 1, 1879	7.00	Henry Ernest Discombe
The Copeland Elk Creek Ditch	Elk creek	Jan. 2, 1892	July 1, 1881	7.00	Chambers Copeland
The Hunter Elk Creek Ditch	Elk creek	Jan. 2, 1892	May 1, 1883	7.00	Lucien B. Hunter
The Whinery, Elk Creek and } Narrow Gauge Ditch	Elk and Narrow } Gauge creeks. }	Jan. 2, 1892	Aug. 27, 1891 } May 15, 1879 }	12.00	W. S. Whinery
The Pastime Irrigating Ditch	South Beaver c'k	May 10, 1892	April 25, 1892	4 25	A. D. Sears
The Cinnaron Canal	Big Cinnaron riv.	July 29, 1892	July 15, 1892	320.00	David J. McCann and James A. Doffmeyer

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 62, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Allen Indian Creek Reser- voir	Indian creek	Allen Indian c'k	Nov. 18, 1891	Oct. 1, 1883	261,360	F. M. Mendenhall
The Pastime Reservoir	South Beaver creek	Pastime irrigat'g	May 10, 1892	April 25, 1892	1,162,497	A. D. Sears

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 63, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Turner Ditch	A Spring branch	Feb. 13, 1892	July 31, 1891	8.00	A. J. and S. H. Turner
The Youngs Ditch No. 1	Springs	Aug. 8, 1892	April 1887	.90	Mary E. Young

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 68, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in the State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Lamont Ditch	Leopard creek	Dec. 17, 1890	Sept. 29, 1890	5.00	Wm. Lamont
The Cottonwood Creek Ditch	Cottonwood creek	Oct. 21, 1891	1891	18.10	James Willetts
The White Ditch	Burro creek	Nov. 4, 1891	May 1884	9.00	Samuel H. Callen
The Taft Ditch	Burro creek	Nov. 4, 1891	May 1884	10.00	Samuel H. Callen
The Lyon Ditch	Oak creek	June 3, 1892	May 30, 1892	6.00	Jared S. Lyon
The Kettle Creek Ditch	Kettle creek	Nov. 11, 1892	Oct. 11, 1892	930.00	W. E. O'Brien and J. M. Doyle

CHAPTER VII.

IRRIGATION DIVISION NO. 6.

GREEN RIVER DIVISION.

The Green River Division comprises Water Districts Nos. 43, 44, 54, 55, 56, 57 and 58.

No decrees have as yet been issued in this division so far as is known to this office.

The only Water Commissioner yet appointed in the division is W. H. Clark, Meeker, for District No. 43. Consequently this department has been unable to obtain statistics from the large part of the State embraced in this division.

The total number of ditches, in this division, embraced in the Report of 1889-1890, was 317, with a total length of 518.40 miles.

During the two years up to Dec. 1, 1892, 101 additional filings have been made in this office, making the total number now 418, with a probable length of about 685 miles.

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 43, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER W. H. CLARK, MEETKER. APPOINTED 1889.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Spaulding Ditch	Piceance creek	Feb. 7, 1891	June 22, 1890	4.17	John C. Shuttle
The Geo. Bretherton Flumed Ditch	{ A tributary of Bretherton gulch }	Feb. 13, 1891	Apr. 25, 1890	1.50	George Bretherton
The Bawder Ditch	Flag creek	Feb. 13, 1891	May 2, 1889	6.65	Mary Q. Bawder
The William McDowell Ditch	White river	Feb. 20, 1891	Aug. 25, 1883	5.05	H. C. Smith
The La Kamp Ditch	White river	Mar. 5, 1891	May 10, 1884	19.10	J. H. La Kamp
The Blair Ditch	White river	Mar. 5, 1891	Apr. 15, 1883	10.00	Duncan Blair
The Skelton Ditch	{ North Fork of White river }	May 18, 1891	May 10, 1886	12.00	Edward Fxa
The South Fork Ditch	Coal spring	May 25, 1891	Nov. 29, 1890	20.00	J. W. Edwards <i>et al.</i>
The Bailey Ditch No. 1	{ South Fork of White river }	May 25, 1891	Nov. 29, 1870	10.00	Thos. W. Bailey
The Bailey Ditch No. 2	Oldmans creek	May 25, 1891	May 15, 1889	10.00	Thos. W. Bailey
The Daum Ditch	North Elk creek	Sept. 21, 1891	May 10, 1887	6.84	John Daum
The Extension of Spaulding Ditch	Piceance creek	Nov. 23, 1891	June 22, 1887	3.00	Thomas King
The Hartke Ditch	Hartke springs	Dec. 11, 1891	May 1, 1889	3.00	Reinhold Hartke
The Hay Bretherton Ditch	White river	Jan. 11, 1892	Mar. 27, 1889	19.50	Henry J. Hay <i>et al.</i>

The Thomas Lunny Ditch	Coal creek	May 2, 1892	April 11, 1892	1.33	Thomas Lunny
The Parish Ditch	Enreka creek	June 30, 1892	June 12, 1892	2.10	Marcellus V. Parish
The Little Colorow Ditch	White river	Sept. 6, 1892	June 14, 1888	5.62	Wm. P. Colthorpe <i>et al.</i>
The Steadman Ditch	White river	Sept. 12, 1892	Aug. 18, 1892	7.32	Henry Steadman
The Rye Grass Enlargem't Ditch	Piceance creek	Sept. 16, 1892	July 12, 1887	10.00	J. B. Collins <i>et al.</i>

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 43, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Parish Reservoir No. 1....	Eureka gulch	Parish ditch.	June 30, 1892	June 12, 1892	50,133	Marcellus V. Parish
The Parish Reservoir No. 2....	Eureka gulch	Parish ditch.	June 30, 1892	June 12, 1892	26,666	Marcellus V. Parish

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 44, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of Stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Wise Irrigating Ditch.....	Williams Fork riv'r	Dec. 6, 1890	April 15, 1888	10.00	Thomas H. Wise
The Juniper Gulch Irrigating Ditch.....	Juniper gulch	Mar. 14, 1891	Oct. 30, 1890	10.00	Stephen Bailey
The Williams Park Irrigating Ditch.....	Fish creek	June 4, 1891	May 13, 1891	18.75	J. W. Rider <i>et al.</i>
The Highland Irrigating Ditch.....	Fish creek	July 13, 1891	Sep. 13, 1889	22.50	John J. Dunckley
The J. W. Kellogg Ditch.....	Deer creek	Nov. 6, 1891	Not given	Not stated	J. W. Kellogg
The Yellow Jacket Ditch.....	Little Beaver creek	Mar. 12, 1891	Dec. 15, 1881	4.75	J. A. Martin <i>et al.</i>
The Milk Creek Mesa Ditch.....	Milk creek	Mar. 19, 1892	Dec. 15, 1891	4.75	Richard S. Fuller
The D. D. Ferguson Ditch No. 1.	Milk creek	April 16, 1892	June 28, 1890	3.50	David D. Ferguson
The D. D. Ferguson Ditch No. 2	Milk creek	April 16, 1892	Feb. 1, 1892	4.00	David D. Ferguson
The Herrick Ditch No. 1	Good Spring creek	July 5, 1892	May 15, 1889	2.00	Wm P. Herrick
The Herrick Ditch No. 2	A big spring	July 5, 1892	May 15, 1889	2.00	Wm. P. Herrick
The Sietlaff Ditch	Milk creek	July 18, 1892	April 9, 1892	5.25	Chas. and Herman Sietlaff
The Houston Ditch	Milk creek	Nov. 14, 1892	Aug. 10, 1892	3.25	Madison Honston

STATEMENT CONCERNING DITCHES—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Bennett Ditch No. 1	Mill creek	Nov. 14, 1892	Oct. 24, 1892	2.25	Mannel Bennett
The Bennett Ditch No. 2	Little creek	Nov. 14, 1892	Oct. 24, 1892	3.00	Mannel Bennett
The Givens Ditch.	Vampa river	Nov. 30, 1892	Oct. 15, 1892	8.00	George Givens

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 44, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Wolcott Reservoir	Springs	Feeder ditch	May 18, 1892	Mar. 29, 1892	125,000	Ellen Wolcott

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 54, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Robidoux Ditch	Little Snake river.	Jan. 7, 1891	April 1, 1888	3.00	Cynthia A. Robidoux
The Wilson Ditch	Battle creek	Jan. 19, 1891	Oct. 1, 1884	3.00	W. W. Wilson
The Wilson Ditch	Wilson creek	Dec. 18, 1891	June 1, 1888	6.01	The Leavenworth Cattle Company
The Slater Fork Ditch	Slater Fork creek	Dec. 18, 1891	May 1, 1883	9.70	The Leavenworth Cattle Company

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 57. RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The High Line Ditch	Fortification creek	Dec. 13, 1890	Nov. 18, 1889	8.50	C. R. Baker. (Amended statement.)
The Dever Ditch	Yampa river	May 4, 1891	Oct. 1, 1888	17.70	Wm. H. Dever <i>et al.</i>
The Wheeler Bros. Ditch	Elk river	May 21, 1891	Fall 1888	7.00	Charles and James Wheeler
The Island Home Ditch	Bear river	May 21, 1891	April 15, 1889	7.00	John Robinson
The Wiant Ditch	Yampa river	June 17, 1891	May 27, 1891	Not given	John Wiant
The Lamb Irrigating Ditch	Fortification creek	Sept. 11, 1891	May 1, 1891	6.00	Zeno Lamb

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 57, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream supplying water therefor.	Name of ditch conveying water thereto.	Date of filing in State Engineer's office.	Time of com- mencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Baker Reservoir	Fortification creek ..	Built on creek ...	Dec. 30, 1890	Nov. 18, 1889	2,352,240	..... C. E. Baker

STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 58, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Arkhurst Enlarge'mt Ditch	Elk river	Dec. 11, 1890	Sep. 15, 1888	6.00	A. S. Hutchinson
The Haugs Ditch	Fish Park creek	Dec. 23, 1890	June 1, 1890	2.00	John J. Haugs
The Martin Ditch	Yellow Jacket c'k	Dec. 29, 1890	May 15, 1890	3.00	J. L. Martin
The Northwestern Colorado Irrigating Canal No. 1.	Yampa river	Dec. 31, 1890	Dec. 1, 1890	199.20	Robert McIntosh <i>et al.</i>
The Northwestern Colorado Irrigating Canal No. 2.	Elk river	Dec. 31, 1890	Nov. 1, 1890	150.00	Robert McIntosh <i>et al.</i>
The Charles & Arthur Leighton Ditch	Roaring Fork of Bear river	Jan. 1, 1891	June 15, 1890	12.00	Charles and Arthur Leighton
The Fish Park Ditch	Fish Park creek	Jan. 15, 1891	Sep. 29, 1890	2.60	Peter Withers
The Cullen Ditch No. 2	Elk river	Feb. 5, 1891	Jan. 16, 1890	8.00	Patrick Cullen
The Cullen Ditch No. 1	Elk river	Feb. 6, 1891	May 10, 1890	5.00	Patrick Cullen
The F. D. Hutchinson Ditch	Roaring Fork of river	Feb. 6, 1891	July 15, 1890	10.00	F. D. Hutchinson
The Kopf Ditch	Middle Hunt c'k	Feb. 18, 1891	May 2, 1890	10.00	Max Kopf
The Fichings Ditch	Middle Hunt c'k	Feb. 20, 1891	Oct. 14, 1890	17.00	M. Fichinger
The Brinker Creek Ditch	Brinker creek	Mar. 13, 1891	Dec. 12, 1890	9.66	Thomas B. Gibbs

STATEMENT CONCERNING DITCHES—Continued.

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet per second.	NAMES OF CLAIMANTS.
The Lawson Creek Ditch	Lawson creek	Mar. 25, 1891	June 20, 1889	5.00	Lawson Bird <i>et al.</i>
The Gibbs & Phillips Ditch	{ Beaver or Chimney creek }	April 27, 1891	June 10, 1891	10.00	T. B. Gibbs and J. P. Phillips
The Wheeler Brothers Ditch	Elk river	May 21, 1891	Fall of 1888	7.00	Charles and James Wheeler
The Supply Ditch	Middle Hunt creek	June 17, 1891	Dec. 9, 1890	72.00	Peter Simons <i>et al.</i>
The Lawrence Ditch	{ South branch of Yampa river }	June 19, 1891	May 27, 1891	10.00	Samuel Lawrence
The Monroe Ditch	Trout creek	July 1, 1891	May 26, 1891	7.00	J. M. Band and John Wyant
The Chipman Ditch	McKinnie creek	Aug. 14, 1891	June 14, 1891	.90	Mary Chipman
The High Line Beaver Ditch	Storm King creek	Aug. 28, 1891	June 26, 1891	11.40	Gottfried Gunter <i>et al.</i>
The Stees Ditch	Cow creek	Sept. 3, 1891	Not given	Not stated.	Ed. W. Stees. (Map only. No statement)
The Baxter & Summer Enlargement of the Walton Cr'k Ditch	Walton creek	Sept. 14, 1891	June 28, 1891	2.00	Milo Baxter and John Sumner
The Mager Ditch	Sage creek	Oct. 8, 1891	Sept. 1, 1888	4.00	Hugo Mager
The Asher Ditch	Elk river	Oct. 28, 1891	May 1, 1890	8.00	Charles D. Asher
The Temke Ditch	Trout creek	Oct. 30, 1891	May 26, 1891	12.00	John Temke <i>et al.</i>
The Stees Ditch (amended statement)	Cow creek	Nov. 13, 1891	May 9, 1891	8.00	E. W. and J. H. Stees. (Statement only)

The Park City Ditch No. 1.....	Fish creek.....	Dec. 16, 1891	July 8, 1891	1.50	J. C. Kennedy
The Park City Ditch No. 2.....	Fish creek.....	Dec. 16, 1891	Aug. 14, 1891	.50	
The Leckenby Extension and Enlargement of the Priest Ditch and Priest Extension Ditch.....	Priest creek.....	Feb. 23, 1892	Aug. 13, 1891	1.00	A. J. Leckenby
The Enlargement of the Borghi Ditch.....	Elk river.....	April 4, 1892	Nov. 10, 1891	10.00	Robert E. Cook and Lloyd F. Bates
The Cook Brothers Ditch.....	Oak creek.....	June 6, 1892	May 27, 1892	14.00	W. O. Cook and F. H. Cook
The Gibbs Ditch.....	Brinker creek.....	June 11, 1892	May 1889	9.70	Thomas B. Gibbs
The Daisy Ditch.....	Phillips creek.....	June 11, 1892	May 1884	10.00	John P. Phillips
The Finger Rock Ditch.....	{ South Fork of Phillips creek }	June 11, 1892	May 1889	15.00	
The Powell Ditch No. 1.....	Watson creek.....	June 16, 1892	May 1889	2.00	Arnold Powell
The Powell Ditch No. 2.....	Watson creek.....	June 16, 1892	May 1, 1891	7.50	
The Anna's Ditch.....	Hunt creek.....	June 27, 1892	May 2, 1891	4.90	Mark Choate and W. S. Barr
The Hardscrabble Ditch.....	Watson creek.....	June 27, 1892	Spring 1884	6.00	
The Enlargement of the Barr Ditch.....	Hunt creek.....	June 27, 1892	May 1, 1887	11.00	J. Albert Bird
The Ferguson Ditch.....	Watson creek.....	June 27, 1892	May 10, 1886	15.00	W. S. Barr and Mark Choate
The Willow Spring Ditch.....	Waste waters.....	June 27, 1892	May 2, 1891	5.20	
The Crow Creek Ditch No. 4.....	Crow creek.....	July 13, 1892	June 30, 1892	10.00	John Ferguson and John Hill
The Enlargement of the F. D. Hutchinson Irrigating Ditch.....	{ East branch of Yampa river }	July 14, 1892	June 1, 1892	10.00	
The Scott & Carpenter Ditch.....	Grouse creek.....	Aug. 11, 1892	May 12, 1892	21.00	D. H. Carpenter and John B. Scott
The Brumback Ditch.....	Oak creek.....	Aug. 17, 1892	Aug. 9, 1892	18.00	

Thomas P. Brumback

STATEMENT CONCERNING DITCHES.—*Concluded.*

NAME OF DITCH OR CANAL.	Name of stream from which water is taken.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The J. Hart Ditch.....	Oak creek.....	Aug. 18, 1892	May 30, 1892	4.00	J. Hart
The Mary Louise Ditch.....	Elk creek.....	Sept. 15, 1892	June 17, 1892	5.00	John E. Turgeon
The Orme Ditch.....	Ladds creek.....	Sept. 28, 1892	May 11, 1888	8.52	Joseph B. Male
The Kernaghan Ditch.....	{ Little Cotton- wood creek..... }	Oct. 1, 1892	July 1, 1892	4.00	William Kernaghan
The Turner Ditch.....	Elk river.....	Nov. 23, 1892	Oct. 1, 1892	10.00	Hiram E. Turner
The Smithurst & Spies Enlargement of the Walton Creek Ditch.....	Walton creek.....	Nov. 30, 1892	July 1, 1892	6.00	William Smithurst and Samuel Spies

STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 58, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

NAME OF RESERVOIR.	Name of stream conveying water therefor.	Name of ditch leading water thereto.	Date of filing in State Engineer's office.	Time of commencement of work thereon.	Capacity claimed in cubic feet.	NAMES OF CLAIMANTS.
The Crater Reservoir	Middle Hunt creek	Supply ditch	June 17, 1891	Dec. 9, 1890	314,882.530	Peter Simons <i>et al.</i>
The Carpenter and Scott Reservoir	Grouse creek	All built on creek	Aug. 11, 1892	May 12, 1892	862,080	D. H. Carpenter and John B. Scott.
The Scott Reservoir No. 1.	Grouse creek	All built on creek	Aug. 11, 1892	May 12, 1892	1,186,500	
The Scott Reservoir No. 2.	Grouse creek	All built on creek	Aug. 11, 1892	May 12, 1892	437,406	

WEIR MEASUREMENTS.

In response to many inquiries as to a simple and yet accurate method of measuring water, the following tables and cautionary notes are published as a matter of general information to those interested in the use of water for irrigation and other industrial pursuits.

They are taken from those compiled by Prof. L. G. Carpenter, of the State Agricultural College, at Fort Collins, and were published in circular No. 13 of that institution.

If the weir be placed so as to meet the following conditions, the tables attached to this bulletin may be used with confidence that the result is correct within one per cent. :

First—That the water shall not exceed twenty-four nor be less than three inches in depth.

Second—That the depth of water on the crest shall not be more than one-third the length of the weir.

Third—The crest of the weir itself should be horizontal ; the sides vertical ; with both crest and sides brought to a sharp edge on the up-stream face. The least rounding increases the discharge. The up-stream face should be vertical.

It is also necessary to secure :

Complete contraction.

Free discharge.

And the approach of water to the weir without perceptible velocity, cross currents or eddies.

Hence the following additional conditions :

Fourth—The distance from the side walls to the crest should be at least equal to the depth on the weir, in order to secure contraction.

Fifth—The distance of the crest above the bottom of the channel should be at least twice the depth of the water flowing over it, in order to avoid the effect of the bottom on the crest contraction.

Sixth—The air must have free access under the falling sheet.

Seventh—The approaching channel should be made much larger than the weir opening, to bring the velocity of approach within low limits.

For small depths, the actual discharge may exceed the amount here given by two to five per cent.

DISCHARGE OVER RECTANGULAR WEIRS OF VARIOUS LENGTHS, AND WITH VARIOUS DEPTHS OF WATER, WITH COMPLETE CONTRACTION.

$$\text{Formula, } D = 3\frac{1}{3} \left(1 - .2H\frac{3}{2}\right)$$

Depth of Water on Crest.		DISCHARGE IN CUBIC FEET PER SECOND.							Correction to be ADDED to each of the preceding to give dis- charge with NO contr'n.
		With two Complete Contractions.							
In Inches.	In Feet.	1 ft. Long.	1½ ft. Long.	2 ft. Long.	3 ft. Long.	5 ft. Long.	10 ft. Long.		
0.3	.025	.0133	.0200	.0267	.0400	.0677	.133	.0000	
0.6	.050	.0369	.0556	.0743	.1116	.1863	.3726	.0004	
0.9	.075	.0674	.1015	.1350	.2040	.3410	.6830	.0010	
1.2	.1	.1033	.1550	.2078	.3132	.5240	1.0519	.0021	
1.5	.125	.1438	.2175	.2912	.4385	.7332	1.4695	.0037	
1.8	.15	.1879	.2847	.3816	.5743	.9627	1.9312	.0058	
2.1	.175	.2355	.3575	.4795	.7235	1.2115	2.4315	.0085	
2.4	.2	.2861	.4351	.5843	.8824	1.4787	2.9690	.0119	
2.7	.225	.3399	.5177	.6956	1.0513	1.7627	3.5412	.0160	
3.0	.25	.3959	.6042	.8126	1.2293	2.0227	4.1462	.0208	
3.3	.275	.4543	.6946	.9350	1.4157	2.3771	4.7803	.0264	
3.6	.3	.5149	.7287	1.0725	1.6103	2.7057	5.4441	.0328	
3.9	.325	.5775	.8863	1.1952	1.8129	3.0483	6.1368	.0401	
4.2	.35	.6420	.9871	1.3423	2.0226	3.4082	6.8547	.0483	
4.5	.375	.7079	1.0905	1.4732	2.2385	3.7691	7.5956	.0574	
4.8	.4	-----	1.1974	1.6160	2.4623	4.1489	8.3655	.0674	
5.1	.425	-----	1.3070	1.7689	2.6926	4.5400	9.1585	.0785	
5.4	.45	-----	1.4189	1.9221	2.9874	4.9410	9.9725	.0905	
5.7	.475	-----	1.5333	2.0790	3.1703	5.3529	10.8004	.1036	
6.0	.5	-----	1.6500	2.2392	3.4177	5.7748	11.6372	.1178	
6.3	.525	-----	1.7689	2.4029	3.6709	6.2069	12.5469	.1331	
6.6	.55	-----	1.8899	2.5698	3.9295	6.6489	13.4474	.1496	
6.9	.575	-----	2.0129	2.7395	4.1928	7.0995	14.3658	.1671	
7.2	.6	-----	2.1381	2.9128	4.4621	7.5607	15.3072	.1859	
7.5	.625	-----	2.2646	3.0881	4.7351	8.0291	16.2641	.2059	
7.8	.65	-----	2.3929	3.2663	5.0130	8.5064	17.2399	.2271	
8.1	.675	-----	2.5234	3.3478	5.2965	8.9939	18.2374	.2496	

DISCHARGE OVER RECTANGULAR WEIRS—*Continued.*

Depth of Water on Crest.		DISCHARGE IN CUBIC FEET PER SECOND.					
		With Two Complete Contractions.				Correction to be ADDED to each of the preced- ing to give dis- charge with no contr'n.	
In Inches.	In Feet.	2 ft. Long.	3 ft. Long.	5 ft. Long.	10 ft. Long.		
8.4	.7	3.6313	5.5536	9.4882	19.2497	.2733	
8.7	.725	3.8170	5.7747	9.9901	20.2786	.2984	
9.0	.75	4.0052	6.1702	10.5002	21.3252	.3248	
9.3	.775	4.1961	6.4704	11.0190	22.3905	.3525	
9.6	.8	4.3884	6.7734	11.5434	23.4684	.3816	
9.9	.825	4.5833	7.0810	12.0764	24.5649	.4121	
10.2	.85	4.7806	7.3929	12.6135	25.6790	.4440	
10.5	.875	4.9792	7.7075	13.1641	26.8056	.4774	
10.8	.9	5.1792	8.0257	13.7177	27.9477	.5123	
11.1	.925	5.3806	8.3473	14.2779	29.1044	.5486	
11.4	.95	5.5833	8.6725	14.8451	30.2766	.5864	
11.7	.975	5.7875	9.0012	15.4192	31.4642	.6258	
12.0	1.0	5.9933	9.3333	16.0000	32.6667	.6667	
12.3	1.025	6.1999	9.6679	16.5859	33.8809	.7091	
12.6	1.05	6.4083	10.0058	17.1784	35.1099	.7531	
12.9	1.075	6.6184	10.3471	17.7777	36.3532	.7988	
13.2	1.1	6.8299	10.6890	18.3825	37.6110	.8460	
13.5	1.125	7.0427	11.0370	18.9916	38.9781	.8949	
13.8	1.150	7.2569	11.3866	19.5080	40.1615	.9455	
14.1	1.175	7.4725	11.7396	20.2308	41.4573	.9977	
14.4	1.2	7.6894	12.0935	20.8569	42.7654	1.0516	
14.7	1.225	7.9075	12.4507	21.4893	44.0856	1.1072	
15.0	1.25	8.1269	12.8103	22.1269	45.4184	1.1646	
15.3	1.275	8.3475	13.1733	22.7713	46.7663	1.2237	
15.6	1.3	8.5694	13.5375	23.4189	48.1224	1.2846	
15.9	1.325	8.7927	13.9047	24.0727	49.4927	1.3473	
16.2	1.35	9.0175	14.2744	24.7318	50.8753	1.4117	
16.5	1.375	9.2437	14.6450	25.3936	52.2651	1.4779	

DISCHARGE OVER RECTANGULAR WEIRS. — *Concluded.*

Depth of Water on Crest.		DISCHARGE IN CUBIC FEET PER SECOND.		
		With Two Complete Contractions.		Correction to be AD- DED to each of the preceding to give discharge with NO contraction.
In Inches.	In Feet	5 feet Long.	10 feet Long.	
16.8	1.4	26.0625	53.6710	1.5460
17.1	1.425	26.6355	55.0870	1.6160
17.4	1.45	27.4122	56.5122	1.6878
17.7	1.475	28.0950	57.9515	1.7615
18.	1.5	28.7814	59.3999	1.8371
18.3	1.525	29.4719	60.8584	1.9146
18.6	1.55	30.1675	62.3290	1.9940
18.9	1.575	30.8681	63.8116	2.0754
19.2	1.6	31.5727	65.3042	2.1588
19.5	1.625	32.2809	66.8059	2.2441
19.8	1.650	32.9935	68.3185	2.3315
20.1	1.675	33.7093	69.8393	2.4207
20.4	1.7	34.4269	71.3710	2.5120
20.7	1.725	35.1546	72.9146	2.6054
21.0	1.75	35.8827	74.4662	2.7008
21.3	1.775	36.6151	76.0286	2.7984
21.6	1.8	37.3520	77.6020	2.8980
21.9	1.825	38.0709	79.1814	3.0196
22.2	1.85	38.8341	80.7716	3.1034
22.5	1.875	39.5812	82.3717	3.2093
22.8	1.9	40.3321	83.9816	3.3174
23.1	1.925	41.0860	85.5995	3.4275
23.4	1.95	41.8436	87.2271	3.5399
23.7	1.975	42.6045	88.8635	3.6545
24.	2.0	43.3665	90.5061	3.771
27.	2.25	— — — —	107.44	5.06
30.	2.50	— — — —	125.16	6.59
36.	3.00	— — — —	162.79	10.39

THE LAW GOVERNING DITCH AND RESERVOIR FILINGS, WITH FORMS FOR SAME.

Letters continue to be received at this office, almost daily, relative to the requirements of the law in making claims to water rights. These come generally from remote parts of the State, where the usual forms are not obtainable, and where copies of the law are not convenient for reference.

Many statements sent for filing are deficient in essential points, others are without the requisite plats, and not a few are so indefinite in statements of facts as to render them practically of no effect. Such are returned for correction and frequently come back without improvement.

To meet these inquiries and to secure, as far as practicable, uniformity in the statements filed, a circular was prepared in the early part of 1892, in which was set forth the law bearing upon the subject, followed by forms for both ditch and reservoir filings.

This law was incorporated in the Fourth Biennial Report from this office, but inasmuch as the copies of that report were long since exhausted, and the demand for information continues, it is deemed advisable to reproduce it in the circular which follows :

CIRCULAR.

STATE ENGINEER'S OFFICE, }
DENVER, COLORADO, 1892. }

To Ditch Owners, and Others Interested in Irrigation Works in Colorado:

This circular is prepared in response to the many inquiries received at this office, in regard to matters connected with the recording of claims to water rights, and the obtaining of decrees for ditches, canals and reservoirs.

RECORDING STATEMENTS OF CLAIMS TO WATER RIGHTS.

Session Laws of 1887 amend General Section 1720, of the General Statutes of Colorado, to read as follows :

"SECTION 2. Every person, association or corporation, hereafter constructing or enlarging any ditch, canal or feeder for any ditch or reservoir for irrigation, and taking water directly from any natural stream, and of a carrying capacity of more than one cubic foot of water per second of time, as so constructed or enlarged, shall, within ninety

(90) days after the commencement of such construction or enlargement, file in the office of the County Clerk and Recorder of the county in which the head-gate of such ditch or feeder may be situated, and also in the office of the State Hydraulic Engineer, a map showing the point of the location of such head-gate, the route of such ditch or canal, or the high-water line of such reservoir or reservoirs, and the route of the feeder to, and ditches or canals from such reservoir or reservoirs; the legal subdivisions of the lands upon which such structures are built, or to be built, if on surveyed lands; the names of the owners of such lands, as far as the same are of record in the office of the county clerk of the county in which they are situated; such courses, distances and corners, by reference to legal subdivisions, if on surveyed lands, or to natural objects, if on unsurveyed lands, as will clearly designate the location of such structures. Upon or attached to such map shall be a statement showing:

"*First*—The point of location of the head-gate above mentioned.

"*Second*—The depth, width and grade of such ditch, canal, or feeder.

"*Third*—The carrying capacity of such ditch, canal, or feeder, in cubic feet per second of time, and the capacity of such reservoir or reservoirs in cubic feet, when filled to the high-water mark.

"*Fourth*—The time of commencement of work on such structures, which time may be dated from the commencement of the surveys thereof.

"In case of an enlargement, such statement shall also show the matters required in items second, third and fourth above, as to the enlargement, and state the increased capacity arising from such enlargement. If such statement be filed within the time above limited, priority of right of way and water accordingly shall date from the day named as the day of commencing work; otherwise, only from the date of filing the same: *Provided*, That nothing herein contained shall be taken to dispense with the necessity of due diligence in the prosecution of such structures on the part of the prosecutors of the same. Such statement shall be signed by the person, association, or corporation on whose behalf it is made, and the truth of the matters shown in such map and statement shall be sworn to by some person in whose personal knowledge the truth of the same shall lie." Approved April 20, 1887; in force July 19, 1887.

In order to have an accurate map made, and a full and definite statement drawn up, as required above, it will be necessary to have a proper survey made of the ditch, canal, or reservoir, as the case may be, by a competent engineer; and it is suggested that it will be well to have the survey made at once to the extreme length and to the full size to which it is probable that the same may be constructed. This being done, the map should be drawn on a scale of not less than one

inch to 2,000 feet, and larger if practicable. Then the statement should be drawn up and duly executed and acknowledged.

Following is a form for a ditch or canal statement which covers the requirements of the law above quoted, and which is recommended for use by this department:

STATE OF COLORADO, }
COUNTY OF..... } ss.

STATEMENT OF CLAIM TO WATER RIGHT.

Irrigation Division No.

Water District No.

The undersigned,

owner.... of the following described ditch, in compliance with the requirements of General Section No. 1720 of the General Statutes of the State of Colorado, and the amendments thereto, do.... hereby make this statement for filing in the proper offices:

1. The name.. of the owner.. of the said ditch,
..... whose postoffice address
is..... county

2. The name of the said ditch is the
ditch.

3. The head-gate of the said ditch is located on the.....
..... bank of....., from
which stream said ditch diverts its supply of water, at a point whence
the..... corner of section.....
in township..... of range..... west, bears.....,
..... feet.

From the head-gate the said ditch runs in a general.....
direction, as shown on the map hereto attached, and made a part of
this statement; which said map also shows the ownership of the lands
over which said ditch passes, and distances of the ditch line from the
government corners.

4. The length of the said ditch is..... miles.
5. The width of the said ditch is..... feet on the bottom,
and..... feet at the high-water line.
6. The depth of the said ditch is..... feet at high-water
line.
7. The grade of the said ditch is..... feet per mile.
8. The carrying capacity of the said ditch is..... cubic
feet of water per second of time.

9. Work was commenced on the said ditch on the _____ day of _____, A. D., 18____

10. The _____ enlargement of said ditch was commenced on the _____ day of _____, A. D. 18____

11. The said ditch, as enlarged, is _____ feet wide on the bottom, _____ feet wide at high-water mark, _____ feet deep at high-water mark, and the increased capacity, arising from such enlargement, is _____ cubic feet of water per second of time.

_____[SEAL.]

_____[SEAL.]

_____[SEAL.]

STATE OF COLORADO }
COUNTY OF _____ } ss.

_____, being first duly sworn, on his oath deposes and says that he has read the above and the foregoing statement, and has examined the map thereto attached, and that the matters therein set forth are true, of his own knowledge.

Subscribed and sworn to before me, this _____ day of _____, A. D. 18____

Reservoir statements for filing should be as follows :

STATE OF COLORADO, }
COUNTY OF _____ } ss

STATEMENT OF CLAIM TO WATER RIGHT.

IRRIGATION DIVISION No. _____

WATER DISTRICT No. _____

The undersigned, _____, _____ owner of the following described reservoir, in compliance with the requirements of General Section No. 1720 of the General Statutes of the State of Colorado, and the amendments thereto, do hereby make this statement for filing in the proper offices :

1. The name _____ of the owner _____ of said reservoir _____ whose postoffice address is _____ county, _____

2. The name of said reservoir is The _____ reservoir.

3. The said reservoir is situated on the _____ $\frac{1}{4}$ of the _____ $\frac{1}{4}$ the _____ $\frac{1}{4}$ of the _____ $\frac{1}{4}$, the _____ $\frac{1}{4}$ of the _____ $\frac{1}{4}$, and the _____ $\frac{1}{4}$ of the _____ $\frac{1}{4}$ of section _____, in township _____ of range _____, in _____ county, aforesaid.

The _____ of said reservoir being at a point whence the _____ corner of said section _____ bears _____ feet.

4. The area of said reservoir at the high-water line is _____ acres, and at low-water line is _____ acres. The depth of water that can be drawn off is _____ feet, making the available capacity for storage _____ cubic feet, for which claim is hereby made.

5. The said reservoir derives its supply of water from the _____, through the _____ ditch, the head-gate of which is located at a point whence the _____ corner of section _____, in township _____, of range _____, bears _____ feet. Said ditch has a carrying capacity of _____ cubic feet of water per second of time.

The head-gate of the feeder from said _____ ditch to the said reservoir is at a point whence the _____ corner of section _____, in township _____, of range _____, bears _____ feet.

6. Said feeder is _____ feet wide on the bottom, _____ feet wide at high-water mark ; is _____ feet deep, with a grade of _____ feet per mile, and a carrying capacity of _____ cubic feet of water per second of time.

7. Work was commenced on said reservoir on the _____ day of _____ A. D. 18____, and on the feeder above described, on the _____ day of _____ A. D. 18____

8. The outlet ditch from said reservoir _____ feet wide on the bottom, _____ feet wide at high water mark, is _____ feet deep, has a grade of _____ feet per mile, and a carrying capacity of _____ cubic feet of water per second of time.

9. Work was commenced on said outlet on the _____ day of _____, A. D. 18____

_____ [SEAL.]

_____ [SEAL.]

_____ [SEAL.]

STATE OF COLORADO, }
COUNTY OF _____ } ss.

_____, being first duly sworn, on his oath deposes and says that he has read the above and foregoing statement,

and has examined the map thereto attached, and that the matters therein set forth are true of his own knowledge.

Subscribed and sworn to before me, this _____ day of _____
A. D., 18_____.

PLATS.

If a *printed* form is used for the statement, the plat may be made on the inside pages left for that purpose. Otherwise, a tracing is preferable to any other kind of plat, to be attached to the statement.

If a tracing is used for the plat, attach it to the statement so as to fold inside; plats on plain paper, or blue prints may be on the outside.

Statements and plats should be folded so as not to be larger, either way, than the size of letter paper in three folds.

Engineers should place their names on plats, showing by whom the work was done.

J. P. MAXWELL,
State Engineer.

EXPENDITURES

FROM THE STATE ENGINEER'S ASSISTANTS AND MATERIAL FUND,
FROM JANUARY 1, 1891, TO DECEMBER 1, 1892.

Appropriation for salaries for assistants and material } fund for the years 1891-1892 }		\$ 5,750 00
PAID		
John S. Titcomb, Deputy State Engineer, salary	\$ 2,394 00	
L. R. Hope, assistant for field work, salary	1,856 55	
L. R. Hope, traveling expenses	232 00	
T. S. Watkins, draughtsman for Fifth Biennial Report	150 00	
John Titcomb, computer for Fifth Biennial Report	114 00	
C. J. Maxwell, copying records and office work	176 60	
Typewriting	29 00	
Observer at Cache la Poudre Gauging Station No. 1	72 00	
Observer at South Platte Gauging Station No. 3	113 04	
Observer at Clear Creek Gauging Station No. 4	23 66	
Observer at St. Vrain Gauging Station No. 5	111 90	
Observer at Bear Creek Gauging Station No. 6	27 55	
Observer at Boulder Creek Gauging Station No. 7	95 00	
Observer at Big Thompson Gauging Station No. 8	46 65	
Observer at South Boulder Gauging Station No. 9	65 55	
		\$ 5,507 50
Unexpended balance		\$ 242 50

REPORT

ON

State Bridges, Roads and Reservoirs,

CONSTRUCTED UNDER APPROPRIATIONS

FROM THE

INTERNAL IMPROVEMENT AND INCOME FUNDS

AND

STATE CANAL No. 1.

TO HIS EXCELLENCY,

JOHN L. ROUTT.

Governor of Colorado.

SIR—As Secretary and member of the various commissions created by the Eighth General Assembly for the construction of certain State bridges, wagon roads and reservoirs, I have the honor to report the following action by the respective commissions, under the provisions of the several acts.

CHAPTER VIII.

BEAR RIVER WAGON ROAD.

Referring to the report of the State Engineer of Colorado for the years 1889-90—subject matter, "Bear River Road," it will be observed that further proceedings looking to the completion of said road were held in abeyance, pending the adjudication of the case of S. L. Smith vs. the Board of Construction, wherein Smith, the contractor, attempted by *mandamus* proceedings to compel the Board to issue a certificate of completion on a claim of compliance with the terms of the contract.

This issue was tried before Judge Goddard in Leadville at the ———— term of the District Court of the ———— District, and resulted in a verdict for the State, from which decision the plaintiff gave notice of appeal.

Thereupon the Board again issued a call for bids for the completion of the road, and on September 11, 1891, awarded the contract to J. L. Norvell, of Craig, for the sum of \$3,250.

December 7, 1891, the completed road was accepted by the Board of Construction, and the contract price paid.

The case of S. L. Smith, on appeal, being still pending, on May 24, 1892, a final adjustment was effected by the payment to him of \$190 in full settlement of all claims against the State for work done on the road and material furnished.

STATEMENT OF EXPENDITURES.

Balance on hand from last report.		\$ 4,170 30
J. S. Titcomb, for maps, etc	\$ 12 00	
Advertising	39 63	
P. F. Reinhardt, team hire.	16 50	
Geo. S. Oliver, superintendence of Construction	185 00	
J. L. Norvell, Contractor	3,250 00	
S. L. Smith, under first contract	190 00	
		3,693 13
Balance unexpended		\$ 477 17

BEAR RIVER BRIDGE.

Provision was made for this bridge by an Act of the Seventh General Assembly, and contract entered into for its construction during the year 1890, but it was not completed at the time of the State Engineer's last report to the Governor, owing to certain causes of delay therein mentioned.

Subsequently, and after notice of completion from the contractors, I made a personal examination of the bridge, and found the masonry abutments and pier to be entirely unsatisfactory, so much so as to require their complete tearing out and rebuilding with new material.

This was done by the contractors in the fall of 1891, under the supervision of a competent engineer from this office, and in December of 1891, the Board of Construction paid the contract price \$6,389.00 for a very acceptable structure.

STATEMENT OF EXPENDITURES.

Unexpended balance from last report		\$ 6,706 64
J. C. Kennedy, for superintendence	\$ 210 00	
State Engineer, expense of inspection	18 15	
Geo. S. Oliver, for superintendence	62 00	
Bullin Bridge Company, account contract	6,389 00	
		6,679 15
Balance unexpended		\$ 27 49

WHITE RIVER BRIDGE.

House Bill No. 179, approved April 8, 1891, provides for the construction of a bridge across White river, in Rio Blanco County, at a point near White River City, appropriates \$5,000 therefor, and designates the Governor, State Engineer and the Chairman of the Board of County Commissioners of Rio Blanco County, as the locating and building Board.

Pursuant to the law a definite site was selected, adjacent to the site of the old bridge, suitable plans

adopted providing for a combination bridge of one ninety-six-foot span, with masonry abutments, and bids called for, of which nine were received.

The award was made to the St. Joseph Bridge and Boiler Works, of St. Joseph, Mo., for the sum of \$2,898, being the lowest bid therefor, which amount was paid in July of 1892, on completion and acceptance by the Board of Construction and the Board of County Commissioners of Rio Blanco County.

The bridge is a substantial structure of wood and iron, ninety-six feet long, with fourteen feet roadway, the upper chords and posts being of Oregon pine, and the floor and joists of native material.

The masonry abutments are built of large sandstone blocks, well bonded and with ample wings projecting well into the banks, and contain about sixty-seven yards of masonry.

The completed structure is well worth the money expended.

STATEMENT OF EXPENDITURES.

Appropriation		\$5,000 00
John S. Titcomb, for profiles, etc.	\$ 6 00	
Advertising for plans and bids	54 55	
Geo. E. King Bridge Co., for plans	50 00	
State Engineer, expense of inspection (two trips).....	77 35	
W. H. Clark, engineer in charge of construction.	234 00	
St. Joseph Bridge & Boiler Works, account contract	2,898 00	
		3,319 90
Balance unexpended		\$ 1,680 10

PITKIN COUNTY BRIDGE.

House Bill No. 355 approved April 9, 1891, provides for the construction of a State bridge across Castle creek in Pitkin County and appropriates \$12,000.00 therefor.

The Board of Construction is composed of the Governor, State Engineer and Chairman of the Board of County Commissioners of Pitkin County.

After the preliminary work of making surveys and calling for plans and bids, the award for the construction was made to the King Iron Bridge and Manufacturing Co., for the sum of \$11,400.00, and contract entered into at that price.

The full price paid for the bridge was \$1,728.00, the Bridge Company having a special contract with the Board of County Commissioners of Pitkin County for the difference.

The bridge was accepted by the Board of Construction December 14, 1891, as being in compliance with the terms of the contract, and a voucher drawn in favor of the Bridge Company for the sum of \$11,400.00.

The spans and approaches of the bridge are as follows:

Beginning at the east end, it consists of three spans of wooden trestle work of fifteen feet each, leading to the iron part of the structure, which is as follows: One tower span of fifteen feet; one bridge span of thirty feet; one tower span of thirty feet; one truss span of seventy-five feet; one tower span of thirty feet; one truss span of seventy-five feet; one tower span of thirty feet; one truss span of thirty feet, and one tower span of fifteen feet, leading to the wooden part at the west end, which consists of nine spans of wooden trestle work of fifteen feet each. Total length of wooden approaches, 180 feet; total length of iron bridge, 330 feet, and total length of entire structure, 510 feet.

The posts of the towers are set on masonry piers and securely anchored thereto.

This bridge is situated about one mile west of Aspen and extends from mesa to mesa across the chasin of Castle creek, the elevation of roadway from creek being about seventy-five feet.

The roadway is eighteen feet in the clear with a four and one-half foot sidewalk one each side.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 12,000 00
Advertising for plans and bids	\$ 42 70	
Making profiles and copying specifications	13 00	
G. W. G. Ferris & Co., for inspection of iron at shops	100 00	
G. W. Nyce, for engineering and superintendence	304 00	
State Engineer, expense trip for inspection	14 25	
The King Iron Bridge and Manufacturing Co., (Contract)	11,400 00	
		11,873 95
Balance unexpended		\$ 126 05

ROUTT COUNTY BRIDGE.

"An Act to provide for the construction of a bridge across Bear river, in Routt County, near the town of Craig", and appropriating \$5,000 for the same, approved April 8, 1891.

Board of Construction, the Governor and the State Engineer of this State, with the Chairman of the Board of County Commissioners of Routt County.

Acting under authority of the Board, the State Engineer made a personal examination of the ground and selected a site for the proposed bridge at the ferry crossing of Bear river, in the line of a county road, and just below the town of Craig.

Plans were called for as provided by law, and after the adoption of proper plans, bids were received, of which there were six, the award being made to the Wrought Iron Bridge Company of Canton, Ohio, for the sum of \$4,445, as being the lowest bidder.

Contract was entered into October 24, 1891, and the bridge was completed and accepted February 12, 1892.

This bridge is an iron structure 200 feet long, with a fourteen-foot clear roadway, and consists of three sixty-six-foot spans, center to center, resting on pile piers and abutments.

Owing to the great depth required to secure a solid foundation and the attendant cost, it was not found practicable to put in a masonry substructure.

The bridge is a neat, a serviceable structure, is in the line of extensive travel, and is highly appreciated by the community in which it is located.

STATEMENT OF EXPENDITURES.

Appropriation.....		\$ 5,000 00
J. C. Kennedy, survey of three sites.....	\$ 81 50	
Advertising for plans and bids.....	30 34	
Maps, profiles and copying.....	7 20	
E. Shelton, superintending construction.....	74 00	
State Engineer, expense of locating site.....	18 15	
Wrought Iron Bridge Co. (Contract).....	4,445 00	
		4,656 19
Balance unexpended.....		\$ 343 81

DE BEQUE BRIDGE.

Senate Bill No. 116, approved April 10, 1891, provides for the construction of a State bridge across the Grand River near the town of De Beque, in Mesa County, and appropriates \$15,000 for the payment of the same.

The Board of Construction is constituted as those heretofore reported upon.

The site selected by the locating committee is situated just above the town of De Beque and adjacent to the ferry crossing of the Grand river, the approaches being more favorable and the length of bridge shorter at this point than at other sites pointed out.

Suitable plans having been adopted, fifteen bids for construction under the same were received, ranging from \$12,490 to \$14,926.

The award was made to the Missouri Valley Bridge and Iron Works of Leavenworth, Kansas, at the first mentioned figures, and contract entered into October 24, 1891.

Work was prosecuted on the piers during the winter months, and they, together with the earth approaches, were completed April 27, 1892, but owing to the continued high stage of water in the river at that

time, and its increasing volume, it was not considered advisable to attempt the erection of the superstructure until a low stage of water, later in the season, would render it safe. Further time was therefore given under the contract.

The entire structure was completed and accepted October 4, 1892.

The bridge is a steel truss, and consists of one span of 250 feet, center to center. The roadway is sixteen and one-quarter feet in the clear between the trusses, which are forty feet in height.

The top chords and posts to trusses are Z bar sections, the plans being designed and furnished by J. W. Hoover, of the Wrought Iron Bridge Company of Canton, Ohio. All material was inspected and passed upon at the shops of the manufacturers.

The piers are masonry resting on a sandstone bed-rock, and were built of the best sandstone obtainable in the vicinity, and under the immediate supervision of A. J. McCune, of Grand Junction, engineer in charge.

The bridge is a very creditable structure, and probably represents a cash outlay of something in excess of the contract price.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 15,000 00
Geo. S. Oliver, for survey of site.....	\$ 16 65	
Advertising for plans and bids	54 75	
Office work, maps, profiles and typewriting.....	14 50	
Wrought Iron Bridge Co., for plans and specifications.....	100 00	
G. W. G. Ferris & Co., inspection at shops	36 35	
A. J. McCune, engineer in charge	224 40	
State Engineer, expenses, two trips to site	29 40	
Missouri Valley Bridge & Iron Works, contract price.....	12,490 00	
		12,666 08
Balance unexpended		\$ 2,033 92

RIO GRANDE BRIDGE.

Erected in pursuance of "an Act to construct a State bridge across the Rio Grande river between the counties of Conejos and Costilla at, or near a point known as the Costilla crossing of said Rio Grande river, and making an appropriation of ten thousand dollars therefor," approved April 13, 1891.

The Governor, State Engineer and the Chairmen of the Boards of County Commissioners of the counties of Conejos and Costilla are constituted the Board of Construction.

This act differs from others of similar import in this, that Section 3 and 4 provide that the Board of Construction shall advertise for plans, specifications and bids for constructing said bridge; and from such plans, specifications and bids shall select and accept the best plan and bid according to their judgment.

Thirty-eight plans, modification of plans and bids were submitted under the call; from which the design and bid of the "Wrought Iron Bridge Company," of Canton, Ohio, was selected and accepted by the Board.

Contract was entered into February 12, 1892, at the price bid, \$8,400.00, and the bridge was completed and accepted August 31, 1892.

The site selected for this bridge is about 100 rods below the Costilla crossing of the Rio Grande river, in the head of a box canon, the walls of which rise vertically twenty feet above the bed of the river, and afford a solid and durable foundation for the two ends of the bridge which rest on their crest.

The bridge is an eight-panel Thatcher truss of iron and steel, 313 feet long, with roadway sixteen feet in the clear between trusses. It consists of two spans of 155 feet each, center to center, height of truss twenty-five feet.

The center pier consists of two five feet diameter iron cylinders, twenty-eight feet long, made of five-sixteenths plate, set on a firm foundation and filled with concrete. The tubes are connected by solid web plates, made of three-eighths iron, and extending up for twelve feet to insure rigidity and to prevent the lodgment of driftwood between the tubes.

A strong iron nose twelve feet high, also filled with concrete, faces the up-stream side of the upper cylinder, to act as an ice breaker.

The west end of the bridge has naturally a comparatively level approach. At the east end a cut some 200 feet long was made through rock, with a base sixteen feet wide and greatest depth five feet, to secure an easy grade to and from the bridge.

The structure is substantial, is nicely adjusted in all its details, and the workmanship reflects much credit upon the contractors.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 10,000 00
J. F. Thomas, for surveys	\$ 34 50	
Advertising for plans and bids	44 78	
Office work on profiles and specifications	18 00	
J. F. Thomas, superintendence of construction	171 00	
State Engineer, expenses of two trips to inspect site and bridge	28 35	
Wrought Iron Bridge Co., contract price	8,400 00	8,696 63
Balance unexpended		\$ 1,303 37

BERTHOUD PASS ROAD.

"An Act to provide a Public Wagon Road between Empire in Clear Creek County and the Junction Ranch in Grand County, and appropriating twenty thousand dollars therefor," approved April 8, 1891, constitutes the Governor, State Engineer, and Chairmen of the Boards of County Commissioners of Clear Creek and Grand Counties a Board for the purchase, repair, and construction of said road.

At a meeting of the above named Board, held July 24, 1891, the State Engineer was instructed to cause a careful survey to be made between the points designated in the act, and to report the result thereof to the Board, together with estimates of the cost of construction.

From such survey it was ascertained that the most practicable line between the points named, and touch-

ing the intermediate points designated, was already occupied by a toll road owned and operated by the "Georgetown and Middle Park Wagon Road Company;" that the cost of building a road outside of the right of way of said company would far exceed the limit of the appropriation for the purpose; and that the cost of repairing the road of said company and making certain desirable changes therein would approximate the sum of fifteen hundred dollars.

On the 16th day of December, 1891, there was submitted to the Board the following proposition for the sale of the "Georgetown and Middle Park Wagon Road," by the representative of said above named company:

DENVER, COLO., Dec. 16, 1891.

"To the Honorable Chairman of the Board of Construction of the State Wagon Road between Empire, in Clear Creek County, and Junction Ranch, in Grand County:

SIR—You are hereby offered the entire stock of the Georgetown and Middle Park Wagon Road, consisting of two hundred and fifty shares of \$100.00 each, fully paid up and free from all encumbrances, said corporation owning the wagon road from Empire, in Clear Creek County, via Berthoud Pass and Cozzins Ranch, and terminating at Junction Ranch in Grand County, a distance of twenty-seven miles, for the sum of \$18,500.00.

(Signed)

J. MILTON COPELAND,

President Georgetown and Middle Park Wagon Road."

The Board of Construction, having previously made a personal examination of the road, finding that extensive repairs had been made on all that part in Grand County, and north of the Berthoud pass, and that the same was in good condition, and in compliance with the act as to grade and width, accepted the offer of sale, and upon the delivery to the Board of all the stock of said company, duly assigned, ordered a voucher drawn for the sum of \$18,500.00 in full payment therefor.

The survey of that part of the road in Clear Creek County contemplated the building of about 100 rods of new road, around what is known as the Little Blue hills, thereby avoiding a very steep pitch on bed rock, and two bridges which would require rebuilding; also repairs to certain other bridges and points. The new line of road was necessarily on the steep mountain side, in a

bed of large boulders, and difficult of construction, being principally rock work. This work was performed during the months of July, August and September of 1892, under the superintendence of Thos. Rowe, of Georgetown, and cost \$1,249.43, for which sum a voucher was drawn, after examination and acceptance of the road.

The general line of the road has been kept in repairs by the Counties of Clear Creek and Grand during the season of 1892, and it is reported that the travel over the same has very materially increased since the tolls were taken off and the road placed in repair.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 79,000 00
F. A. Maxwell, for surveys	\$ 167 00	
E. C. Hawkins, for maps and profiles	35 00	
The Georgetown and Middle Park Wagon Road } Company, purchase price of road	18,500 00	
Thos. Rowe, for new road and repairing old	1,249 43	
		\$ 19,951 43
Balance unexpended		\$ 49 57

GRAND RIVER CANON ROAD

Built pursuant to "An Act to provide for the construction of a State Wagon Road through the Canon of the Grand River, below and from the town of Hot Sulphur Springs to the mouth of said canon, and to provide for the construction of a bridge across said Grand river at the mouth of said canon," and appropriating \$15,000.00 therefor, approved April 8, 1891.

Board of Construction, the Governor, State Engineer and Chairman of the Board of County Commissioners of Grand County.

The act evidently contemplated the construction of the road through the canon on the southeast side of the river, the bridge to be built at the lower end of the canon, in order to make the road accessible to the bulk of the travel, which is on the opposite side of the river.

From a careful examination of the canon made in person, it became apparent that the more desirable location for the road would be on the northwest side of the

river following closely to the high water line, not only on account of economy in construction, but in maintenance as well, thus also doing away largely with the necessity for a bridge at the immediate mouth of the canon.

Under the instructions of the Board, the State Engineer caused a survey to be made of the line, and prepared plans and specifications for the proposed road.

Bids were called for as provided by the act, of which five were received. The award was made to Levy & Moore, contractors, for the sum of \$13,500.00, as being the lowest responsible bidders, and contract entered into October, 1891. Something over five months were consumed in the construction and at times from sixty to 100 men were employed.

The road is only two and two-fifth miles in length, but mostly rock work, several hundred feet of the canon having a vertical wall, with its base at the water's edge, the river being contracted to fifty and seventy-five feet in width, necessitating solid rock cuts, it being impracticable to build up in the river-bed on account of the obstruction to the narrow channel.

In other places heavy rock slides covered the steep mountain side from the river's edge up the slope for several hundred feet, and the excavation of the road-bed at the base precipitated the loose material above into the road-bed, necessitating the removal of several thousands of yards of waste. The work being prosecuted during the winter months, deep falls of snow were encountered and close supervision of the work was required to secure a proper foundation for the road-bed.

The contract was completed and the road accepted April 15, 1892.

A petition from the Commissioners of Grand County was presented to the Board of Construction, asking that the bridge, required by the act, be located and built at a point selected by them on the river some two and one-half miles below the mouth of the canon, the petition maintaining that the site selected would require a shorter bridge, was more accessible, and would accommodate a greater number of people than at the mouth of the canon.

In pursuance of the law the Board advertised for plans for a wooden bridge; but a bridge at the mouth of the canon being of questionable utility, and the people of that section being divided in sentiment as to the most favorable point below; and it further appearing to the Board that the construction of a bridge at any point away from the immediate vicinity of the mouth of the canon would be exceeding its authority, concluded to take no further action in the matter, unless vested with legislative authority to change the location of the site.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 15,000 00
F. A. Maxwell, for surveys	\$ 148 95	
Advertising for bids and plans	28 01	
George S. Oliver, for superintendence	675 82	
Office work in maps and profiles	18 00	
Levy & Moore, contractors	13,500 00	
		14,370 78
Balance unexpended		\$ 692 22

HINSDALE AND SAN JUAN COUNTY WAGON ROAD.

"An Act to construct a State Wagon Road from a point near the foot of Lake San Christoval, in Hinsdale County, to a point of intersection with the Silverton and Animas Forks wagon road near Animas Forks," and appropriating \$6,000 therefor; approved April 9, 1891.

This act provides that "said wagon road shall be surveyed and the route selected by the State Engineer, and that the same shall be constructed under the superintendence of the State Engineer and the Chairman of the Board of County Commissioners of the County of Hinsdale."

In the summer of 1891 a survey was made of the route more particularly described in section 1 of the act, by J. J. Abbott, of Lake City, under the direction of the State Engineer, from which it was ascertained that the line was some thirty miles in length, over a mountainous country, most of it quite difficult of construction,

and requiring fifteen bridges. Maps, profiles and estimates were made, the latter far exceeding the appropriation. It was, nevertheless, urged by representatives from Hinsdale County that a call for bids be made, hoping that proposals might be received within the limit, it being stated that the county was not in a financial condition to assist in the construction.

A call was therefore made in July of 1892, but no bids were received, since which time no further action has been taken.

It was further urged that the application of the available fund toward the more difficult portions of the road and important bridges would accommodate extensive travel and materially advance the interests of that section, but such use of the fund could not be considered against the plain terms of the law, which provided that if the appropriation was not sufficient to complete the road no part of it should be used, except for survey, unless the County Commissioners or other responsible parties should agree to furnish the amount required in excess of the appropriation. The matter is therefore held in abeyance, awaiting legislative action.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 6,000 00
J. J. Abbott, for survey and maps	\$ 515 65	
Office work on plans and specifications	6 00	
Advertising	7 80	
		529 45
Balance unexpended		\$ 5,470 55

MONTEZUMA AND DOLORES COUNTY WAGON ROAD.

"An Act to aid the counties of Montezuma and Dolores, Colorado, in constructing a wagon road from Dolores, Montezuma County, to Rico, Dolores County," and appropriating \$10,000.00 therefor, approved April 14, 1891.

The Governor, State Engineer, and Chairman of the Board of County Commissioners, of Montezuma County, are constituted a Board of Construction.

In the month of September, 1891, together with A. S. Samson, Chairman of the Board of County Commissioners of Montezuma County, I made an examination of the route of the above described road, commencing at Dolores, and following thence up the Dolores river to Rico, and selecting in a general way the line of the proposed road. We found something of a road the entire distance, following the valley of the Dolores and crossing the river twenty-five or thirty times.

The Rio Grande Southern Railroad was at that time being constructed through the valley, and had appropriated much of the old road and more of the desirable ground for wagon road construction, making it necessary to locate more or less of the line on steep hill sides where heavy cuts in earth and rock would be required.

A. L. Fellows, an engineer of Cortez, was employed to make the locating survey, which he accomplished during the months of October and November, following.

The distance between the points named in the act was found to be thirty-five miles, and nine bridges were required at crossings of the Dolores river, ranging from fifty to one hundred and fifty feet in length.

Estimates were made from the data thus furnished, which placed the cost of construction at approximately fifteen thousand dollars.

A meeting of the Board of Construction was held April 26, 1892, to which the State Engineer made a report of survey and estimates. It was, however, deemed advisable to call for bids, under plans and specifications to be furnished by the State Engineer, and notice to that effect was duly published.

No proposals were received and the Board has taken no further action in the premises.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 10,000 00
A. L. Fellows, for survey, levels and plats	\$ 861 85	
Advertising	63 17	
State Engineer, expense of inspection	36 10	
Office work on plans and specifications	24 00	
		985 12
Balance unexpended		\$ 9,014 88

DOUGLAS COUNTY ROAD,

Built under "An Act to make an appropriation from the internal improvement fund for the construction of a State road to connect the Sedalia and Caledonia Springs wagon road with the county wagon road between Bergen Park and Florissant," approved April 15, 1891. Appropriation, \$8,000.00.

The survey of this road was made by Deputy State Engineer J. S. Titcomb, during the months of September and October, 1891.

The initial point was on the South Fork of South Platte river at intersection with the Sugar creek road from Sedalia. Thence up the South Fork four and one-half miles; thence up Trout creek three and one-half miles; thence up West creek five and one-half miles to terminus. Total distance thirteen and one-half miles.

Twenty bridges were provided for in the specifications, the longest being 100 feet.

After advertising for proposals, the contract for construction was awarded to the Western Construction Company, of Denver, for the sum of \$6,825.00, and contract entered into November 5, 1891.

The road and all bridges were completed and accepted November 29, 1891.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 8,000 00
J. S. Titcomb, for surveys, maps and profiles	\$ 368 50	
Advertising	20 80	
Katherine Grace, copy of contract and bond	1 05	
J. S. Titcomb, for superintendence	83 70	
Western Construction Co. (contract)	6,825 00	
		\$ 7,299 05
Balance unexpended.		\$ 700 95

CLEAR CREEK COUNTY ROAD.

"An Act to amend section 1 of An Act entitled 'An Act to build a wagon road in Clear Creek County from a point near the mouth of Trail run to the Argo mine

and terminate at the Ouida Cabin,' approved April 24, 1889," approved April 16, 1891.

This amendment to the act of 1889 changes the location of a portion of the road and calls for the most practical route from a point near the Ouida mine on the creek, by way of the Argo and Lamartine mines to the head of Spring gulch, there to connect with the Spring gulch wagon road. Section 2 of the act of 1889 provides that "said road shall be built upon a grade not to exceed thirteen feet to the hundred, and with no curvature of less than twenty feet to the hundred, and a solid road-bed of not less than twelve feet wide."

I made an examination of the ground July 20, of this year, and found a well-traveled road from the point in Spring gulch, connecting with the county road, to the Lamartine mine, a distance of about two and one-half miles, and on what seemed to be the most practical route.

The Lamartine mine is situated on the crest of the divide between Spring gulch and the creek and is the highest point on the proposed road.

From the Lamartine mine to the Argo mine the present road follows down a very steep gulch, the distance being about half a mile. From the Argo mine to the Ouida mine a good road was also found, distance about half a mile.

A survey of the route was made in August last, also, estimates based thereon, from both of which it was ascertained:

First—That the proposed road would be about four miles in length.

Second—That but half of the old road could be utilized and kept within the limit as to grade provided by the act.

Third—That to so change the line between the Lamartine mine and the head of Spring gulch that it will not exceed the limit as to grade, and construct a "solid road-bed twelve feet wide," would, as estimated, exceed the appropriation, and furthermore, such changed location would, on account of the peculiar topography of the country and its liability to snow drifts, be on much less favorable ground than the present road.

A "solid road-bed twelve feet wide" is entirely unnecessary in the mountains, where proper turnouts

are provided, and on steep mountain side work such a bed will cost from one-fourth to one-third more than a ten-foot bed, while the latter would answer every purpose.

Plans and specifications were prepared and bids called for, but in view of the facts above set forth, the Board of Construction concluded to take no further action in the matter, unless Clear Creek County or other parties should agree to advance such a sum of money as would, with the appropriation, make a wagon road strictly in compliance with the act.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 5,000 00
George S. Oliver, account survey	\$ 143 95	
Advertising	27 86	
Typewriting	2 50	
State Engineer, expense of inspection	4 00	
		178 31
Balance unexpended		\$ 4,821 69

CONEJOS AND ARCHULETA COUNTY ROAD,

Provided for by "An Act to construct a State Wagon Road from a point known as Le Due's toll road, in Conejos County, to a point known as West Fork, in Archuleta County," and appropriating \$12,000 therefor, approved April 9, 1891.

In making a personal examination of the ground and selection of the route for the above described road, I left the Denver & Rio Grande Railroad at Antonito, in Conejos County, thence followed up the Conejos river some ten or twelve miles to the initial point, known as Le Due's toll road. Continuing along the river, the mining camp of Platora was reached at a distance of about thirty-five miles. Thence the route lay in a northwesterly direction, over a road already constructed by the State, from Platora over a high divide into the headwater of Alamosa creek, thence up the Alamosa about three miles, and then following in a northwesterly direction an old United States government road to the

summit of the San Juan mountains, about three miles south of Summitville, in Rio Grande County.

Continuing along the government road a very rapid descent was made onto the headwaters of the South Branch of the San Juan river and down said river to the West Fork and terminus of the proposed road.

While something of a road was found the entire distance, a very small portion was located on favorable ground, or could be utilized in the building of a permanent road. That portion over the range was on very rough and broken ground, exceedingly swampy in places and very difficult to repair, nor was it apparent where a better line could be found.

Two engineer forces were employed to make the survey, one in charge of J. F. Thomas, of Manassa, on the eastern slope, and another in charge of F. W. Robinson on the western slope.

The surveys were completed and returns made about October, 1, 1891. The entire length of road was found to be fifty-eight miles, and twenty-six bridges were required at the various crossings of the Conejos, San Juan, and other streams, ranging from ten to one hundred and fifty feet in length, with a combined length of 1,078 feet. A profile of the entire line was made in this office and careful estimates followed, which placed the cost of construction about \$17,000, and so far above the appropriation that it was found impracticable to proceed further unless the two counties of Conejos and Archuleta would agree to meet any deficiency in excess of the appropriation. In June, 1891, the Board of Construction received assurances that such guarantee would be given, and made a call for bids, based upon specifications to be furnished by the State Engineer.

Two bids were received and that of S. C. Barthelson of Sanford, Colorado, for the sum of \$10,000 was accepted, Mr. Barthelson having a special agreement with the two sureties named for a certain amount above the price bid.

Contract was entered into and the work is now progressing, but will probably not be completed before next season some time, as it will be impracticable to work at high altitudes on the range during the winter months.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 12,000 00
State Engineer, expense of inspection	\$ 22 50	
J. F. Thomas, account survey eastern slope	554 50	
F. W. Robinson, account survey western slope	595 21	
Office work, profiles, calculations, etc	116 00	
Advertising	27 40	
		1,315 61
Balance unexpended		\$ 10,684 39

SAGUACHE RESERVOIR.

Section 1 of An Act passed by the Eighth General Assembly, and approved April 16, 1891, appropriates \$30,000 for the construction of one or more reservoirs on or near Saguache Creek, in Saguache County, at some suitable point, or points, within or near township forty-three (43), north of range two (2), east of the N. M. P. M., or township forty-three (43), north of range three (3), east of N. M. P. M.

Section 3 of said Act provides that the State Engineer shall make such examination and surveys as he shall deem necessary to determine the feasibility of the construction of a reservoir or reservoirs at the place, and make to the Board of Construction report of his proceedings therein and his conclusions.

Such an examination was made in August of 1891, the State Engineer being accompanied by F. M. Hill, Chairman of the Board of County Commissioners of Saguache County, S. E. Kirkendall, County Surveyor, and others, all more or less familiar with that section of country.

His attention was directed to two sites as being those contemplated by the act. They were on the Cochetopa hills, at an elevation of about 11,000 feet, and distant about thirty-five miles southwesterly from Saguache. They appeared to be the most favorable location for storage purposes of any in the townships named.

The first examined was on the Middle Fork of Saguache creek where a granite dyke crossed the creek, forming a short box canon about 200 feet wide, the

walls being irregular and approaching a vertical, with a height of sixty to seventy feet.

The valley widened out to a maximum width of about 1,000 feet, excepting at the confluence of the North and Middle Forks, where it was somewhat wider.

A dam sixty-five feet high would flood an area of about ninety acres, and give a capacity of 120,000,000 cubic feet, approximately, or 2,700 acre feet.

The dam would require solid masonry work, and aside from its other unfavorable features would cost so much in excess of the appropriation that further consideration of the site was at once dropped.

The second site is situated near the South Fork, on sections 30 and 31, township 43 N., R. 3 E. N. M. P. M., and about four miles due south of the first. It has been an old lake bed of contracted area, the rim at the north end being cut through so that it drains to the bottom. An earth embankment built at this outlet with a maximum height of fifty feet would be 1,100 feet long on its crest, would require 119,000 cubic yards of earth, and with proper discharge pipes, valve, well, and rip-rapping would cost approximately \$45,000.00.

The area covered at high-water line would be eighty-two acres, giving a capacity of 70,000,000 cubic feet, or about 1,640 acre feet.

The source of water supply would be the South Fork of the Saguache; length of supply ditch, one and one-third miles; approximate cost of construction \$3,500.00.

Total cost, \$48,500.

To reduce the height of dam sufficiently to bring the cost within the appropriation would of course proportionately decrease the capacity, and would also involve a rock cut in the rim on east side of site for spill-way purposes; whereas, with the dam at the above proposed height, the high-water line in reservoir would be at same elevation as crest of rim and give a natural and safe spill-way.

It did not appear to the Board of Construction that the quantity of water possible to store in such a reservoir would justify the expenditure of so much money, at an altitude where it would be impracticable to store

water during the winter months when not required for irrigation, where the cost of maintenance would be high, requiring the employment of a man a large portion of the year to keep the ditch in repairs, and regulate the intake and discharge of the water, and where the kinds of crops produced would not stand a high tariff on water for irrigating purposes.

Attention was later called to an available site for a reservoir, on the main Saguache creek, some fifteen miles above the town of Saguache, a survey of which was also made; also, a site adjacent to the town; but the two sites were so distant from the townships named in the act that they could not reasonably be construed to be "at" or "near" the same, hence have not been seriously considered by the Board.

A large canal known as the Del Norte has been constructed, taking water from the Rio Grande river near Del Norte, and thence skirting the base of the mountains on the western line of the San Luis valley in a northerly direction and terminating at Saguache creek, about four miles below the town of Saguache, covering practically all the State lands, and from which it would seem possible to supply water for lands in that locality without resort to storage, some years to come, and at much less cost than through a system of reservoirs.

Nor could it be learned that there was an immediate or prospective demand for water in the valley of the Saguache, such as would insure the State the remuneration contemplated by the act.

STATEMENT OF EXPENDITURES.

Appropriation	-----	\$ 30,000 00
State Engineer for expense of inspection.....	\$ 22 50	
L. R. Hope, for survey of site above Saguache.....	155 00	
F. M. Hill for self and team six days, from Villa Grove to reservoir site and return	36 00	
S. E. Kirkendall, account survey of upper site.....	-----	\$ 213 50
		\$ 29,786 50

CUSTER COUNTY RESERVOIR

Senate Bill No. 153, approved April 9, 1891, provides "for the construction of a reservoir at the most convenient and suitable place or places, to be selected by the State Engineer, in township twenty-one (21), range sixty-nine (69) west," and appropriates ten thousand dollars therefor.

Section 2 of the Act provides that the State Engineer "shall make the necessary arrangements for measuring the flow of water in Hardscrabble creek, and shall thereafter calculate and determine the required capacity of such reservoir or reservoirs, to stow the waters flowing in said creek, or so much thereof as may be necessary during the months of April, May and June of each year, and prepare plans and specifications thereof."

Inasmuch as the law did not take effect until July 9, 1891, no observations were made of the flow of said creek during that season, the months designated for such observations having passed. In August, 1891, the State Engineer made an examination of the township named in the act with reference to favorable sites for a reservoir, being accompanied by Mr. Watson, an old resident of that section.

But one site was found to which any consideration could be given, situated on section 14 of said township, in and near the head of a short draw and about one mile easterly from the Wetmore postoffice. A survey was made of this during the following month.

In April of 1892, a gauging station was established on Hardscrabble creek, at Greenwood, and observations taken during the months of April, May, June and July, with the following general results:

Monthly mean discharge for April, cubic feet per second	33.33
Monthly mean discharge for May, cubic feet per second	30.60
Monthly mean discharge for June, cubic feet per second	17.71
Monthly mean discharge for July, cubic feet per second	6.54
Monthly mean discharge for August (10 days), cubic feet per second	6.17

The above figures include only the minimum discharge of a freshet which occurred June 24, between 5:30 o'clock P. M. and 7:20 o'clock P. M. The maximum

discharge during the period was 350 cubic feet, mean 103 cubic feet, and minimum thirty-seven cubic feet per second.

The available quantity for storage from this freshet would be 410,000 cubic feet = 9.40 acre feet.

The total quantity of water decreed to ditches drawing their supply from Hardscrabble creek is 35.9 cubic feet per second, so that the monthly mean discharge for the months taken will show no surplus available for storage purposes. There were, however, twenty-three days in the month of April and May during which time the mean daily discharge of the stream exceeded the quantity decreed to ditches by from 2 to 15 cubic feet per second each day, giving a total of 14,083,200 cubic feet that would be available for storage, if no claims were made upon the water of the creek other than through the decreed ditches.

Attention was next given to estimates of dam construction and reservoir capacity. Under the instructions of the Board of Construction, the State Engineer drew plans for a dam which were generally as follows, as to form and material: Earth embankment thirty feet high at point of greatest depth, width of crest fifteen feet, inner slope three to one, and outer slope two to one. The discharge pipe to be sixteen inches diameter, of cast iron, laid on a concrete bed, with concrete collars, one foot in thickness at each joint, the ends of pipe to be set in masonry, pipe to be laid in trench cut through earth and rock in place at point 175 feet from east end of dam, and having an elevation of three feet above lowest point of reservoir.

The dam would be 1,285 feet long on crest, and would require 64,000 cubic yards of earth; estimated cost, \$14,000.

The high-water line of reservoir would give twenty-five feet greatest depth of water at dam; area of reservoir at high-water line, 11.74 acres; maximum capacity, 4,253,600 cubic feet, equals 100.22 acre feet.

A ditch 2,500 feet long and costing approximately \$1,000.00 would be required to carry water from Hardscrabble creek into reservoir unless private ditches already constructed could be used for that purpose.

The ground occupied by the reservoir site is held under homestead filing, and a relinquishment of the filing will cost \$300.00.

Upon report of the above estimates to the Board, it was concluded that the limited storage area furnished, would not warrant the expenditure. However, upon the earnest solicitation of interested parties, and upon their representations that the right of way for the land, and for the carriage of water through ditches now covering the site, would be arranged for without cost to the State, and furthermore, that they would guarantee the submission of a bid for construction of dam within the available limit of the appropriation, any excess in cost being subscribed by citizens, the Board agreed to call for bids on the plans furnished by the State Engineer.

Two bids were received under the call, one for \$9,250.00, and the second for \$17,450.00.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 10,000 00
E. A. Smith, for surveys	\$ 96 00	
State Engineer, expense of inspection	10 60	
L. R. Hope, two trips to establish gauging station, making plans, calculations, etc	122 00	
W. H. Funderburk, observer, four months	19 15	
W. S. Harmon, sinking test pits	13 00	
Advertising for bids	25 20	
		285 95
Balance unexpended		\$ 9,714 05

APISHAPA CREEK RESERVOIR.

Constructed under "An Act in relation to a public reservoir on the Apishapa creek in the County of Las Animas and State of Colorado, and for other purposes." Approved April 6, 1891.

Appropriation therefor \$15,000.00.

The Board of Construction, the Governor, Secretary of State, and State Engineer.

Sec. 2 of the act provides that "said reservoir shall be erected at some suitable place, to be determined by

the State Engineer, west of the Denver and Rio Grande Railway on or near the Apishapa creek."

An examination of the mountain portion of the Apishapa creek, made by the State Engineer in, September of 1891, resulted in the selection of a site in what is known as the Metote canon, which lies about midway between the Apishapa and Trojilla creeks, and eight or ten miles westerly in the hills from the base of the mountains. The two creeks above named have their heads in the Spanish Peaks, the former having a drainage area of about 100 square miles and the latter of about thirty square miles above the location of the reservoir site.

The reservoir can be supplied with water from either or both of the above streams by means of short ditches, in the one case about two miles in length, in the other three thousand feet.

Metote canon has a limited catch basin, not exceeding four square miles, and hence is not subject to heavy floods, such as would endanger an embankment placed across its channel.

The ordinary flow of the Apishapa and Trojilla creeks is all appropriated during the irrigating season and diverted through numerous small ditches covering the narrow valley to and beyond the base of the mountains, but assurances were given on every hand of an abundant supply during the early spring for storage purposes, and of heavy flood storms later in the season for a second and third filling of the reservoir.

The site is at an elevation of about 7,000 feet, and favorably situated for the discharge of its waters into the Apishapa creek, for use on the valley below, or its immediate use on lands adjacent thereto; but, while the best obtainable in that section, it is not of such liberal proportions as could be desired for the expenditure. It was, however, represented that crops in the valley were frequently matured without irrigation owing to the generous rainfall and that one irrigation would always insure a good harvest; hence it was argued that the water stored could be made to go much farther and give better results than in localities where two and three irrigations were required.

The valley of the Apishapa has an extensive body of excellent land, for which the normal supply of the

stream is wholly inadequate, all of which can be successfully cultivated if one irrigation could be assured.

The reservoir site is located on the N. W. $\frac{1}{4}$ and W. $\frac{1}{2}$ of N. E. $\frac{1}{4}$, section 22, township 31 south, range 66 west, on lands owned by William Lindsey, and embraces 52.73 acres, for which amount a warranty deed was made to the State, an abstract showing clear title accompanying the deed.

Plans and specifications were prepared by the State Engineer based upon surveys previously made and test pits sunk in the line of the dam.

The design of the dam is similar to that of the Monument reservoir, the details of which will be found under its proper heading.

The estimates made on the plans submitted placed the cost of construction several thousand dollars in excess of the appropriation, hence the Board of Construction declined to take further action in the matter unless assurances were given by interested parties that a bid would be received within the available limit. Such assurances were given and proposals were called for with the following result:

J. R. De Remer bid	\$ 13,993
Western Construction Co. bid	19,750

The award was made to Mr. De Remer; contract was entered into November 21, 1891, and work immediately begun. A competent engineer was kept constantly on the ground to see that the specifications were strictly complied with. At one place in the puddle trench, it was found necessary to excavate to a depth of eighteen feet to cut off all underflow and secure a proper foundation.

The trench for discharge pipe was cut well into bed rock and a solid foundation given for the pipe.

It is to the credit of the contractor that no labor was spared to secure a durable structure, notwithstanding the disadvantages of deep snow and severe weather, during which the work was prosecuted.

The contract was completed, including the 33,000 feet of supply ditch, and accepted June 24, 1892.

The supply ditch is eight and ten feet wide on the bottom, will carry four feet in depth of water, has a fall

of seven feet in three thousand, and a capacity to fill the reservoir in about forty hours.

Capacity of reservoir, 20,000,000 cubic feet.

The dam dimensions are as follows :

	FEET.
Length on top.....	800
Width on top.....	16
Inner Slope.....	3 to 1
Outer slope.....	2 to 1
Crest above bottom.....	42
Crest above high water plane.....	7

Inner slope rip-rapped eighteen inches deep to a depth of fifteen feet (vertical measurement) below water line.

For discharge conduit, two sixteen-inch cast iron pipes from inner toe to valve-well; thence cement pipes of same dimensions to outer toe, laid on concrete bed, and with concrete collars at each joint.

Spill-way cut through rock ridge to a depth of eighteen feet from crest of ridge, 170 feet long and twenty feet in width of floor.

MATERIALS REQUIRED.

	CUBIC YARDS.
Earth work in dam.....	95,650
Excavation trench for foot of puddle well.....	1,800
Excavation for discharge pipes.....	240
Excavation for waste-way (partially rock).....	1,040
Rip-rap, surface yards.....	6,000
Masonry, laid in hydraulic cement.....	27
Concrete.....	8
	FEET.
Lumber for gate house.....	600
36-inch well pipe.....	22
16-inch iron pipe.....	161
16-inch Colorado cement pipe.....	164
2 standard 16-inch valves with rods, wheels and braces.....	
1 34-foot iron ladder.....	
1 screen 2 ft. 6 in. by 4 ft. 8 in., of $\frac{3}{8}$ by $1\frac{1}{4}$ iron.....	

STATEMENT OF EXPENDITURES.

Appropriation		\$ 15,000 00
State Engineer, expense three trips for inspection	\$ 26 55	
Geo. S. Oliver, for surveys and maps	146 95	
Office work on plans, specifications, copying and calculations	31 85	
Advertising	23 40	
A. M. Holt, engineer in charge, six months and seven days	476 00	
J. R. De Remer, contractor	13,993 00	
Office work, making plats and estimates and filing same	14 00	
		14,711 75
Balance unexpended		\$ 288 25

CHAFFEE COUNTY RESERVOIR.

"An Act to provide for the construction of reservoirs, and the storage and supply of water to supplement the supply at certain seasons of the flow of certain natural streams of the State, in Chaffee County, etc." Appropriation, \$15,000.00.

Board of Construction, the Governor, State Engineer, and Chairman of the Board of County Commissioners of Chaffee County.

This act provides for the construction of one or more reservoirs for the storage of the waters of Cottonwood creek, Chalk creek, or the South Arkansas river, as may seem best in the judgment of the Board after an examination made by the State Engineer and its advisability reported thereon. Such examination was made during the month of August, 1891, including Cottonwood lake, Boss lake, Monarch park and Fuses gulch. Preliminary surveys of the above sites were subsequently made with the following general results for earth embankments, to wit:

MONARCH PARK.

Greatest depth of dam, feet	55
Greatest depth of water at dam, feet	50
Length of crest, feet	593
Cubic yards in dam	69,221
Area covered at high water line, acres	42.47
Storage capacity, cubic feet	30,821,083

FUSES GULCH.

Greatest depth of dam, feet.....	23.40
Greatest depth of water, feet.....	18.40
Length of crest of dam, feet.....	388.00
Cubic yards in dam.....	20,561
Area covered (approximately), acres.....	30
Storage capacity, cubic feet, (approximation).....	7,000,000

BOSS LAKE.

Greatest depth of dam, feet.....	42
Greatest depth of water at dam, feet.....	35
Length of crest of dam, feet.....	335
Depth of water over lake, feet.....	20
Area of lake, acres.....	12
Cubic yards in dam.....	23,115
Area covered at high-water line, acres.....	32
Storage capacity, cubic feet.....	27,000,000
Storage increased by cut from lake, cubic feet.....	3,650,000

COTTONWOOD LAKE RESERVOIR.

Greatest depth of fill, feet.....	37
Length of crest of dam, feet.....	240
Depth of water over lake, feet.....	10
Surface area of lake, acres.....	40
Area of reservoir at high water line, acres.....	62.25
Cubic yards in dam.....	15,000
Storage capacity, cubic feet.....	22,084,920

The site at Monarch park was not considered feasible on account of cost, the estimate exceeding the appropriation, and from the further fact that it lay just above the mining camp of Monarch and would greatly imperil life and property should a casualty occur. Fuses gulch was equally objectionable on account of its limited capacity, and unfavorable location.

With an expenditure of \$25,000 or \$30,000 Cottonwood lake would make a much better showing of storage capacity, proportioned to cost, than either of the sites named, as thirty feet in depth over the lake would cover an area of 121 acres, and give a capacity of 119,000,000 cubic feet, but unfortunately the only site for a dam is on a rim or ridge of *detritis* extending across the narrow canon

of Cottonwood creek, and cut through by the channel to a depth of twenty-five feet. To prepare a proper foundation on such material for a dam, either thirty or fifty feet in height, would be almost equally, and highly expensive, and the same may be said of an ample and safe spillway, such as would be required where a stream like Cottonwood is obstructed for storage purposes. The site is so situated that a giving away of the dam when full would inevitably result in fearful disaster to people at the mouth of the canon, if not to the town of Buena Vista; hence, with the limited appropriation at hand, the members of the Board were not willing to assume the responsibility of placing any structure at the Cottonwood lake site.

Boss lake has none of the objectionable features mentioned in connection with the other sites, and, aside from its somewhat contracted area, possesses unusual advantages for reservoir purposes. The area of its drainage basin will not exceed four square miles, and yet, from its close proximity to the range it is supplied by Lake Fork, which passes through it, with a uniform flow of twenty to thirty cubic feet of water per second. It is surrounded by high granite ridges, excepting at its eastern extremity, where the water has cut a narrow channel through a low place in the rim, and thence precipitated over a rocky ledge for a distance of 100 feet. The depression in the rim is at a suitable elevation for a safe spillway in rock for all surplus waters.

Under the instructions of the Board the State Engineer prepared plans and specifications in detail for the construction of a dam at this site, and upon completion of same a call was made for proposals.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 15,000 00
C. H. Demarest, account preliminary surveys	\$ 135 50	
L. R. Hope, survey of Cottonwood lake	148 55	
L. R. Hope, office work	24 00	
State Engineer, expense of inspection and livery	25 50	
J. S. Titcomb, survey, plans and specifications for Boss lake	101 50	
Advertising for bids	39 47	
		474 52
Balance unexpended....		14,525 48

MONUMENT CREEK RESERVOIR.

Constructed in compliance with "An Act to provide for the construction of a reservoir near the head of Monument creek, upon, or adjacent to sections fifteen and twenty-two, township eleven, range sixty-seven west, in the County of El Paso, etc."

Appropriation, \$30,000.00.

Board of construction, the Governor, Attorney General and State Engineer.

From an examination of the sections named in the act, made in August, 1891, it became apparent that the most practicable site for a reservoir was to be found on section fifteen, at the confluence of Monument and McShane creeks and just opposite the town of Monument. This location possesses the three prominent and essential features required, namely: A point for the most economical construction of a dam, giving the greatest storage capacity, and affording ample wasteway facilities, the latter being highly important in damming the line of a stream where heavy flood storms are liable to occur.

A careful survey was made of the site with reference to estimates for a dam and storage capacity, assuming top of dam to be forty feet above the low bottom, which gave for dam dimensions:

Length on top, feet	855
Width on top, feet	20
Inner slope	3 to 1
Outer slope	2 to 1
Crest of dam, feet above high-water line	7
Area covered by water, acres	61.94
Storage capacity, cubic feet	37,289,400
Greatest depth to bed-rock on bottom, feet	14
And on abutting hillsides, feet	3 to 4

Character of materials, sand, gravel, and a fair proportion of good clay.

The drainage area of the site is approximately twenty-two square miles.

Normal flow of the stream in the spring and early summer from five to ten, and in the fall from two to three cubic feet per second.

Being at an altitude of 7,000 feet, and well up toward the summit of the divide, the catch basin is subject to severe flood storms, and it is estimated the reservoir can be filled from three to four times during the season.

A report embodying the above statements and estimates was made by the State Engineer to the Board of Construction, whereupon, after due consideration, he was instructed to provide plans and specifications for a dam, as above outlined, and call for proposals for the construction of the same. Pursuant to the call, several bids were received, and the award was made to David McShane for the sum of \$25,000, with the understanding that contract would be entered into as soon as the people of El Paso County should furnish, without cost to the State, a good and sufficient title to the land covered by the reservoir site, dam, spillway, etc.

June 25, 1892, something over six months after the award was made, deeds were received and contract entered into, since which time the work has been progressing fairly well.

Much difficulty has been experienced in excavating the puddle trench to bed rock, due to the heavy underflow, two steam pumps being required to lift and discharge the water. A portion of this water is utilized in sprinkling the body of the dam through hose attachments to the pumps. The discharge pipes are two sixteen-inch cast iron, instead of one eighteen-inch, as provided in the specifications, and are laid in a rock excavated trench, with concrete collars at each joint.

A copy of the specifications is hereto appended for general information, as also diagrams of the design of the dam:

SPECIFICATIONS FOR CONSTRUCTION OF DAM AND APPURTENANCES FOR THE STATE STORAGE RESERVOIR, NEAR MONUMENT, EL PASO CO., COLO.

All dead brush, trees, logs or other loose vegetable matter shall be cleared from the reservoir site and burned.

(This does not include growing willows).

The ground to be covered by the dam shall be entirely cleared of boulders, trees, brush, and any perishable matter, and thoroughly plowed to a depth of seven inches.

At, or near the foot of inner slope, and extending the entire length of the dam—on the lines to be designated by the engineer—shall be excavated the trench for base of the puddle wall; this trench to be not less than five feet in width on the bottom, with slope toward center of dam of two to one, and to be cut into the solid bed-rock, clay, or other impervious matter. All such material excavated which, if not suitable for puddle wall, shall be removed to lower portion of dam. The trench shall be entirely cleared of underflow water, either by pumping or drainage, before being filled with the puddled material, and the soil under the base of dam shall be kept free from water during the entire construction.

Under the entire base of the puddle wall the surface material shall be removed to a depth of three feet, unless hard-pan or rock is encountered at a less depth; the material so excavated to be evenly distributed near outer portion of dam.

Along the line shown on the plat (sheet No. 2) as "out-let pipe," shall be excavated a trench, which shall extend across base of dam and into creek bed, and to give free outlet for water from discharge pipe, to the creek or irrigation canal without danger of washing the base of the dam. The portion of the trench which is to receive the discharge pipe shall be two and one-half ($2\frac{1}{2}$) feet wide on bottom, and cut to conform to grades given by the engineer. If soft earth or mud is encountered in the trench it shall be removed, and replaced with rammed gravel or concrete in such a manner as to give full and solid bearing for pipes.

The discharge pipes shall be eighteen inch cast-iron water pipe, free from flaws or breaks, and properly calked with lead and laid true to a line and grade. The first joint of pipe below the valve in the well shall have a two inch tap provided with a screw plug. At intervals of twenty-four feet along the entire length of the pipe shall be placed "collars" of concrete; one foot in thickness and extending one foot in all directions from outside of pipe. The back filling around the pipes shall be of selected clay, well puddled and rammed, and shall extend from bottom of trench under pipes to natural surface of ground.

The valve shall be firmly set in the well, as shown on the plans, and shall be of standard make, brass bearings, eighteen inches diameter and provided with gearing and "valve-rod" with wheel for operating both in gate-house at top of dam, or at bottom of well. The valve shall be thoroughly braced and blocked, and securely joined and calked to discharge pipes.

The masonry work at head wall and discharge end of pipe shall be of form and dimensions shown on the plans. The stone to be a

good quality of sandstone blocks, laid in Portland hydraulic cement mortar. Special care must be taken to form a perfectly water-tight joint around upper end of discharge pipe.

The masonry valve wall shall be circular in form and four and one-half feet inside diameter to a height of eight feet above the floor, and then arching inward to reduce size to three feet diameter, which shall be carried vertically to the desired height. The floor, or bottom of well, shall rest on bed-rock, or if none can be reached, on a concrete foundation two feet in thickness and extending two feet beyond outside walls. The walls shall be one and one-half feet in thickness, of sandstone blocks, laid in mortar of hydraulic cement, and shall be perfectly water-tight. The top of well to be one foot lower than crest of dam, and from a point two feet below top to be enlarged to an outside diameter of nine feet, which shall be the foundation for gate house. The braces and fastenings shall be set in the wall at intervals of six feet as the work progresses. Especial care will be required to form water-tight joints around discharge pipes and valve. The well shall be provided with an iron ladder twenty inches wide and reaching from top to bottom.

The frame work to be two by four joists, and covering to be one inch boards, battened and painted with red fire-proof paint. The sills to be three by ten, securely bedded in the stone foundation at top of gate-chamber or well. A window of twenty by twenty-four shall be placed in the side facing the water. The door shall be on the side facing the dam, and shall be provided with substantial lock and keys. In floor of gate-house shall be a trap door on hinges, twenty-four inches square, for entrance to well.

The inner portion of dam from toe to slope, and along the base, to a line of two to one slope, intersecting top of dam, eight feet from inside crest of same, and including the trench filling, as shown on plans, shall be of the best clay obtainable, thoroughly puddled and carried up in uniform layers of six inches, and harrowed after addition to each layer. This puddled material shall entirely fill the trench at toe of slope, and to be compactly rammed into the underlying clay or hard-pan, so as to exclude all seepage water. This puddle wall shall extend for a thickness of three feet entirely around exterior of well, from foundation to top, and particular care shall be taken to make it a solid and impervious mass. The central portion of dam from line of puddle wall to a line of one to one slope from outer or lower crest of dam shall be of selected earth and fine gravel, thoroughly wet by means of hose or water cart. The lower portion of dam to be composed of earth, sand and gravel, and such coarse material as was excluded from the puddle wall. This portion also to be thoroughly soaked with water, as the material is deposited.

No ice, snow, or lumps of frozen material, or any brush, trees or perishable matter shall be allowed in any portion of the dam. Any

coarse gravel or other material not easily displaced by rain shall be placed on lower face of dam. The entire inner face of dam, from crest to toe of slope, shall be protected by covering of carefully laid slope paving or rip-rap. No excavation for material shall be made within fifty feet of inner toe of dam.

The waste-way shall be cut to a level of high water line, which is seven (7) feet below top of dam, and shall not be less than 200 feet in width on bottom, unless otherwise directed by the engineer. The material so excavated shall be used in construction of the dam.

The entire work shall be of the best possible character, both in material and workmanship, and done in accordance with these specifications and the plans furnished, and to the entire satisfaction and acceptance of the State Engineer of Colorado.

MATERIALS REQUIRED.

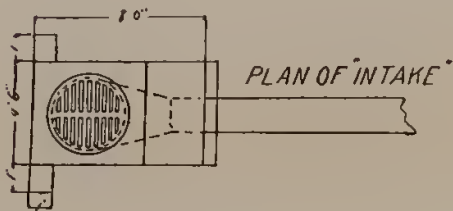
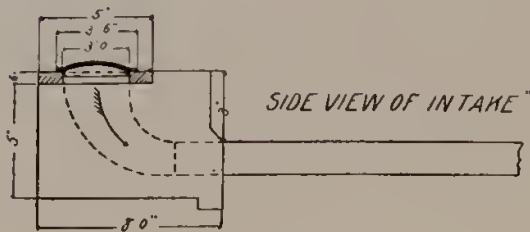
Embankment, cubic yards	96,800
Excavation, base of dam and trenches, cubic yards	14,000
Concrete, cubic yards	100
Masonry, cubic yards	50
Slope paving or rip-rap, square yards	6,342
18-inch cast-iron pipe, feet	204
18-inch valve, with rod and mountings	1
B. M. lumber in gate-house, feet	550
20-inch iron ladder, feet	40
Window, 20x24 inches.	
Iron screen for intake of discharge pipe, 3 feet 6 inches in diam.	
Lock for door, large wrench, oil can, and bar in gate-house.	

The obstruction of the channel of a stream by means of a dam for the impounding of water is looked upon with more or less distrust, and is apt to be regarded as a constant menace to life and property by people living under its line; hence every precaution consistent with a reasonable economy has been exercised in the erection of the dam, and in providing overflow facilities entirely independent of that structure. An examination of a cross section of the dam will satisfy the most skeptical that, with good material, it has ample body and gravity.

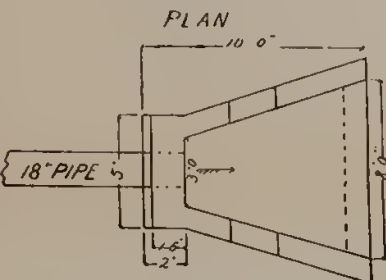
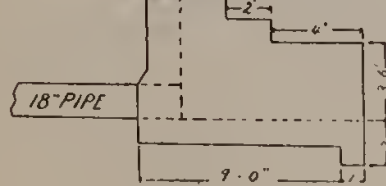
The puddle wall, connected with the inner toe, rests upon a sound bed-rock, and is composed of a very desirable class of clay, the entire inner slope being built of the same material, and made as thoroughly impervious as practicable. Fifty feet in width of spillway will satisfy the most extravagant estimates of possible

General Plans of Dam and Appurtenances for the State Storage Reservoir

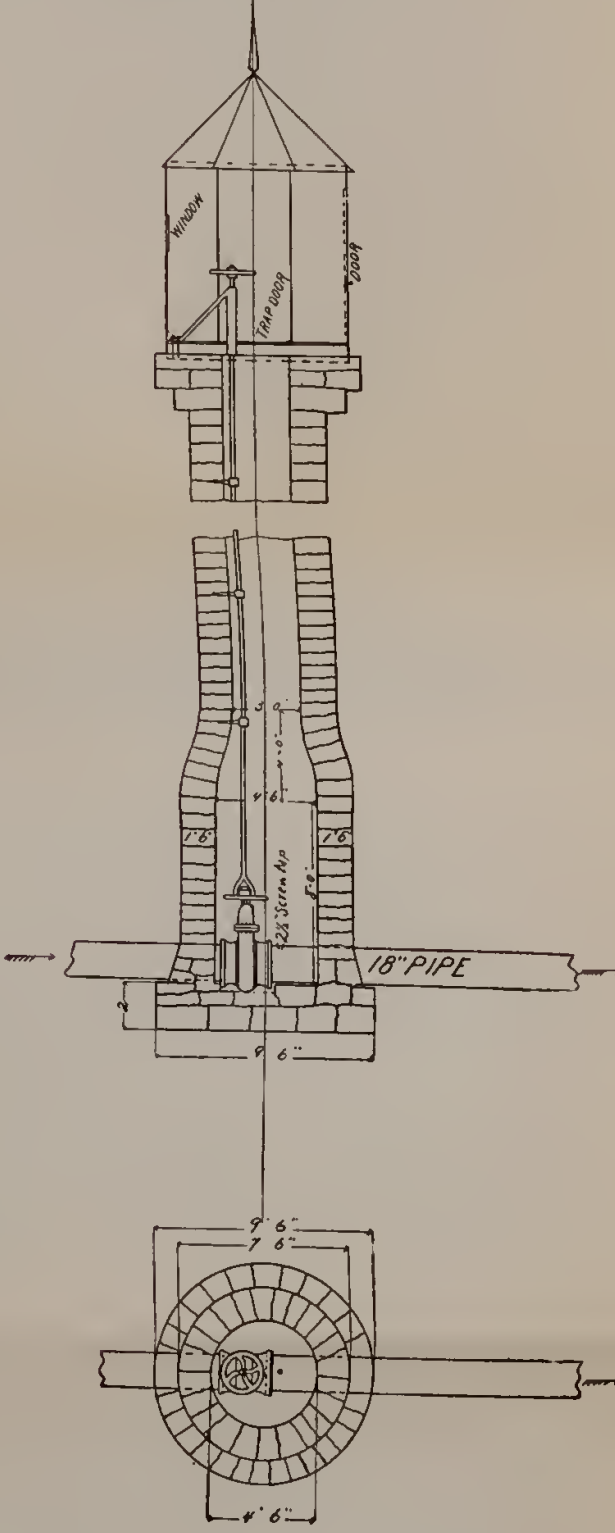
NEAR MONUMENT, EL PASO COUNTY, COLORADO.



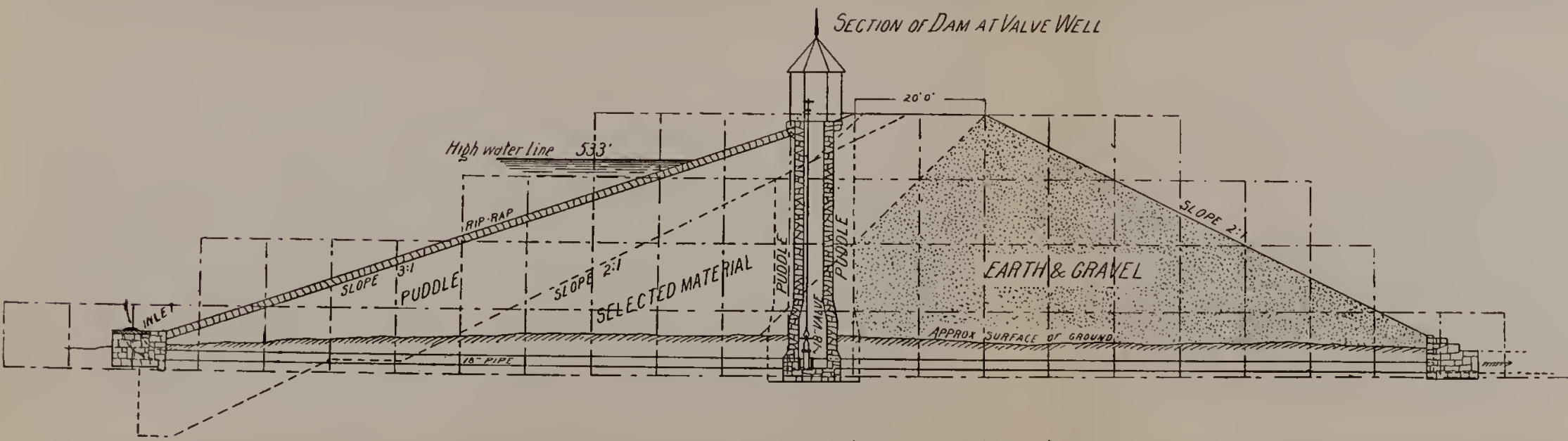
SIDE ELEVATION OF MASONRY AT LOWER END OF DISCHARGE PIPE



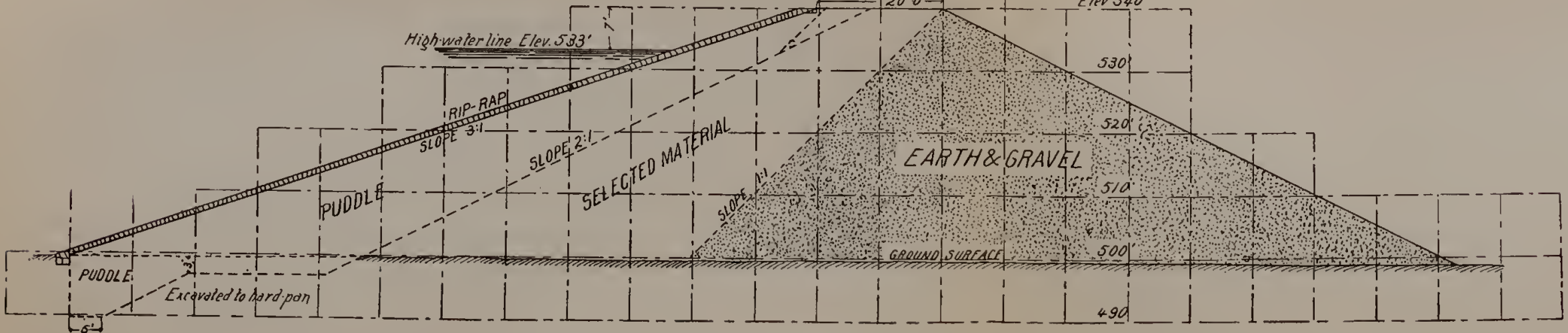
SECTION OF VALVE WELL



SECTION OF DAM AT VALVE WELL



SECTION OF DAM AT CENTRE



THEORY OF THE EARTH AND ITS HISTORY

BY J. H. M. J. VAN DER HAAR

THE EARTH AND ITS HISTORY



drainage from the catchment basin. However, two hundred feet in width are provided, the excavated material being utilized in the dam.

STATEMENT OF EXPENDITURES.

Appropriation		\$ 30,000 00
H. I. Reid, for surveys	\$ 238 00	
E. C. Hawkins, for plans and specifications	34 00	
Advertising for bids.	22 65	
H. I. Reid, engineer in charge (five months)	673 00	
		1,067 65
Unexpended balance		\$ 28,932 35

SUMMARY

OF APPROPRIATIONS FOR INTERNAL IMPROVEMENTS, WITH UNEXPENDED BALANCES, DECEMBER 1, 1892.

DESCRIPTION OF THE IMPROVEMENT.	Amount originally ap- propriated.	Amount expended.	Balance unexpended.	REMARKS.
Bear River Bridge (balance December 1, 1890,) from Appropriation of 1889.....	\$ 6,706.64	\$ 6,679.15	\$ 27.49	Completed
Bear River Wagon Road (balance December 1, 1890,) from Appropriation of 1889.....	4,170.30	3,693.13	477.17	Completed
APPROPRIATIONS OF 1891.				
White River Bridge.....	\$ 5,000.00	\$ 3,319.90	\$ 1,680.10	Completed
Pitkin County Bridge.....	12,000.00	11,873.95	126.05	Completed
Routt County Bridge.....	5,000.00	4,656.19	343.81	Completed
DeBeque Bridge.....	15,000.00	12,966.08	2,033.92	Completed
Rio Grande Bridge.....	10,000.00	8,696.63	1,303.37	Completed
Berthoud Pass Wagon Road.....	20,000.00	19,950.43	49.57	Completed
Grand River Canon Wagon Road.....	15,000.00	14,307.78	692.22	Completed
Hinsdale and San Juan County Wagon Road.....	6,000.00	529.45	5,470.55	No contract let

SUMMARY.—*Concluded.*

DESCRIPTION OF THE IMPROVEMENT.	Amount originally ap- propriated.	Amount expended.	Balance unexpended.	REMARKS.
APPROPRIATIONS OF 1891.				
Montezuma and Dolores County Wagon Road	\$ 10,000.00	\$ 985.12	\$ 9,014.88	No contract let
Douglas County Wagon Road	8,000.00	7,299.05	700.95	Completed
Clear Creek County Wagon Road	5,000.00	178.31	4,821.69	No contract let
Conejos County Wagon Road	12,000.00	1,315.61	10,684.39	Under contract
Saguache Reservoir	30,000.00	213.50	29,786.50	No contract let
Custer County Reservoir	10,000.00	285.95	9,714.05	No contract let
Apishapa Reservoir	15,000.00	14,711.75	288.25	Completed
Chaffee County Reservoir	15,000.00	474.52	14,525.48	No contract let
Monument Creek Reservoir	30,000.00	1,067.65	28,932.35	Under contract
Totals	\$223,000.00	\$102,831.87	\$120,168.13	

From the above summary it will be observed that the Eighth General Assembly made appropriations for internal improvements amounting in the aggregate to \$223,000; that of this sum \$102,831.87 have been expended, leaving a balance of \$120,168.13; of this latter sum \$35,000 have been provided for by contracts not yet carried out.

All bridges provided for by the several acts have been constructed, and the various Boards have pursued the policy of securing the best the available means would permit.

All are iron superstructures with the exception of the White River bridge, which is a combination of wood and iron. All have stone or iron substructures, excepting the Routt County bridge, where pile piers were used. In the cases of three, the unexpended balances are quite large owing to close competition for the work.

Of the wagon roads, three have been constructed. Three have been found impracticable with the means at command and under the conditions imposed, and one is in process of construction by the aid of the interested counties. The requirements have been in all cases for ten feet in width of solid road bed, substantial retaining walls, convenient turn-outs, effective drainage culverts, and well constructed wooden bridges at the crossings of streams.

In the matter of State reservoirs provided for, the law has invested the Boards of Construction with certain discretionary powers, which they have deemed it expedient to exercise to a limited extent.

Some problems are presented, which render the construction, operation, and maintenance of these reservoirs by the State, something of an experiment. By the terms of the several acts relating thereto, excepting as to the Custer County reservoir, they are placed upon the same plane as some corporate enterprises, that is, they are to be operated by the State for revenue, the waters stored in them to be sold or leased to parties desiring the same at rates to be fixed by the Boards. The State thereby becomes an appropriator of water, and is subject to the laws which govern in the cases of individuals and corporations, requiring the filing of plats and statements for the unappropriated waters claimed, and the proving up by adjudication of the priorities and quan-

tities. It is thus made a contestant for the water rights of the streams for the purpose of hire or sale. As an investment, their construction cannot be regarded with special favor, for under the most favorable conditions found in connection with the sites selected, the minimum cost of construction, and the maximum capacity acquired, will place the annual rental of water at the rate of \$2.50 to \$3.00 per acre foot, in order to realize seven per cent. on the outlay and pay the necessary cost of maintenance.

Such prices, charged by corporate ditch owners carrying water for hire, would be regarded as exorbitant, and it is questionable whether the production of ordinary farm crops in localities remote from market would justify such rates.

If the purpose is to assist in the conservation of the water supply of the streams, it may be said this is being done through private enterprises whenever it is apparent that the water is available and the demand will warrant.

The irrigation work already constructed and projected along the valley of the Arkansas river have undoubtedly the capacity to carry all the waters of that stream well up to its maximum stages, and the large areas of fertile lands under the more extensive canals will tax their capacities to the utmost, not only during the irrigating season, but at all seasons when it is practicable to carry the water. Under many of them there are numerous natural depressions, large and small, where it is possible to store water at a minimum of cost, and where it will be required to successfully cultivate the tributary lands. Hence, it is reasonable to assume, that in the near future all the waters of that stream and its tributaries will be conserved through private enterprise and without the aid of the State. What has been said of the Arkansas river is measurably true of all the streams on the eastern slope.

The reservoirs constructed and contemplated by the State have a local interest, and no doubt will be highly appreciated by the few who are benefited, but the idea has generally prevailed that the waters stored are to be free and subject to appropriation, or will be distributed pro rata among all ditches having established rights on the stream below. Were such the case, its equitable distribution among the multitude of ditches would be

impracticable, and the quantity allotted to each ditch would be so infinitesimally small that general disappointment would result.

It may be said in their favor, being located near the heads of the streams, that the flood waters stored and applied to lands in the immediate vicinity will largely find their way back to the channels through seepage, and can be again used in the valleys below, and it is further true, that at their altitudes, where the rainfall is greater than on the plains, a given quantity of water will perform a greater service in the saving and maturing of crops than in lower altitudes, where more irrigations are required.

The sites selected for construction are among the most favorable, are in sections noted for heavy flood storms, and where the natural flow of the streams is very light. Fine bodies of irrigable lands are to be found under them without an available water supply excepting from storage of flood waters.

Complete surveys, plans, and specifications have been made for the others, and they are in readiness for contracting, if in the judgment of the Legislature their construction is regarded as expedient. The various Commissioners, however, did not feel warranted in further prosecuting this work without such legislative endorsement, after the facts had been fully laid before that body.

STATE CANAL NO. 1.

The Progress Report of E. A. Smith, engineer in Charge of construction on State Canal No. 1, at Canon City, for the two years ending November 30, 1892, is herewith submitted.

This work has been confined to that section of the line of survey between Sand creek and the mouth of the Grand canon, a distance of something over two miles. The ground is a succession of broken ridges and sharp canons; the canal following generally along their precipitous slopes. Deep cuts through the points of ridges and heavy fills in the gulches alternate over a large portion of the distance. At one point the top of

the inner slope is sixty-four feet above the floor of the canal. The construction along the steep hill sides has been made largely in cut to insure against the slipping of the lower banks. The materials are conglomerate, cemented gravel and bowlders, coarse red sandstone, shale and heavy clay; a large percentage of them requiring explosives. They have been moved principally with wheelbarrows, small cars being used in some of the longer through cuts; necessarily a slow method.

The sharpest curves of the entire line are to be found on this section, and the largest quantity of material moved per lineal foot of canal.

The work has been of the heaviest and most difficult character, rendered so in a large measure to insure safety and durability.

The prison Hogback tunnel, 750 feet long, all in rock, was constructed in 1890. Tunnel No. 2 at the mouth of the canon, upon which work is now being prosecuted, will be 390 feet long, 270 feet being already driven in a very hard, flinty granite.

The dimensions are twelve feet in width on bottom, and thirteen feet in height to top of arch, vertical walls seven feet.

From tunnel No. 2 up the Grand canon to point of intake, the distance is three and one-fourth miles, the line following along steep mountain sides, and will be largely rock excavation, excepting as fluming may be substituted therefor, the advisability of which, over a portion of the distance, as a temporary expedient, is well worthy of consideration.

It is desirable to divert and appropriate the water at the earliest day practicable in order to avoid complications as to priority of right.

The completion of the canal through the canon and a short extension easterly from the Hogback would render it possible to irrigate some 3,000 acres of land near Canon City, especially valuable, on account of its adaptability to fruit culture. Water for this land would command a high rental and would soon develop into a fair source of revenue.

The State owns some 25,000 or 30,000 acres of land under the line of the canal, to which water rights should

be attached in the immediate future to give value to the rights.

There are also large holdings under the line by individuals and companies, whose interest will be awakened in the construction of the canal along the valley, whenever an assurance is given of its early completion in the canon.

Certain sections in the canon, where the materials will be earth and rock mixed, can be permanently constructed as the work progresses. In other sections, where the material encountered will be solid rock largely, and an extended period required for permanent construction, benches on grade line could be excavated, and wooden structures placed thereon, which will not interfere seriously with building of masonry walls in the future, as the prison labor would be available for that purpose. In the meantime the canal would be carrying water two or three years earlier than under the ordinary conditions, and aside from securing the appropriation and application of the water to land, the revenue derived would doubtless compensate for the extra outlay in temporary flumes.

Some such method as outlined to facilitate the early diversion of water is recommended.

ENGINEER'S OFFICE, STATE CANAL NO. 1, {
CANON CITY, COLO., Nov. 30, 1892. }

TO THE HON. J. P. MAXWELL,

State Engineer.

SIR—I have the honor to submit herewith the first biennial report of progress of State Canal No. 1.

Since November 30, 1890, five hundred and sixty-eight (568) days' work have been done, with an average of one hundred and eight (108) men at work each working day. During this time there has been one and nine-tenths (1.9) miles of ditch built, necessitating 130,099.6 cubic yards of excavation, 47.2 acres of clearing, and 2,500 cubic yards of bowlders removed from the surface of the ground.

During this time there has also been 228 days' work done on a tunnel through point of rock directly opposite mouth of Grape creek, with a daily average of twenty-three men.

There has been built 270 feet of tunnel, in the construction of which there has been 1,950 cubic yards of rock work, 250 cubic yards in making a face and 1,700 cubic yards in tunnel proper.

It has been necessary to use explosives to a very great extent in this work, in fact three-fifths of the work has been of such a nature that it was necessary to use powder.

The cost of earth-work at fair contract prices would have been sixty-six and one-half cents per yard, and of rock-work would have been \$4.80 per yard, making a total of \$95,772.92 exclusive of the customary 10 per cent. for engineering, etc.

The various distributions of this expense are shown by the following table:

ESTIMATE.	
Clearing and grubbing 47.2 @ \$25.....	\$ 1,180 00
Removing bowlders from surface, 2,500 cubic yards @ \$1.....	2,500 00
Earthwork, 48,709.6 cubic yards @ 25 cents.....	12,177 40
Earthwork, 8,326.2 cubic yards @ 50 cents.....	4,163 10
Earthwork, 73,063.8 cubic yards @ 90 cents.....	65,757 42
Tunnel approach, 250.0 cubic yards @ \$3.50.....	875 00
Tunnel approach, 1,700 cubic yards @ \$5.00.....	8,500 00
	\$ 95,152 92
Plus 10 per cent. engineering, etc.....	9,577 29
	\$ 104,730 21

Respectfully submitted,

E. A. SMITH,
Engineer in Charge.

GENERAL SUMMARY OF IRRIGATED AREA.

Following will be found in tabulated form, a general summary of irrigated areas, so far as reported by the Water Commissioners. This statement embraces but thirty-two districts out of the sixty-seven in the State. Water Commissioners have been appointed in forty-one districts, from nine of which, no reports have been received. In certain parts of the State, such as the Bear River valley, and some of the tributaries of that stream, an abundant supply of water is always available, and no Water Commissioners are required. From such there are no means of obtaining definite statistics, and yet it is known that quite extensive areas are cultivated to oats, wheat, potatoes, timothy and other products. At Steamboat Springs, on the Bear river, a flouring-mill has been constructed, and is in successful operation, indicating that no little attention is being given to the raising of wheat in that valley.

Other sections of the western slope are equally favored as to water supply, and Water Commissioners, when appointed, have not been called out.

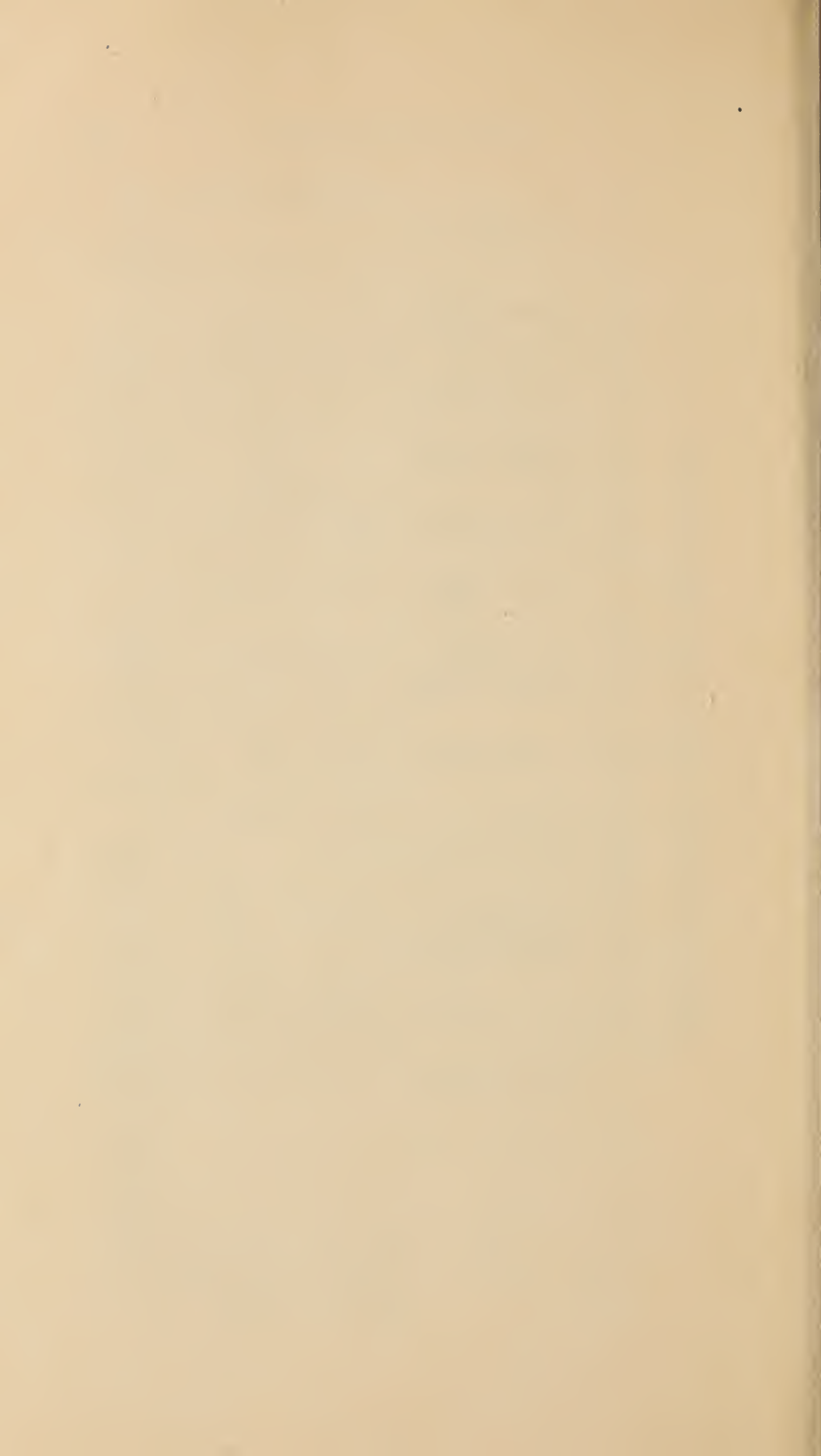
The total area reported as irrigated, is 1,488,164 acres, as against 1,063,304 acres reported for 1890. The area estimated as irrigated throughout the State, in 1890, was 1,544,585 acres. Add to the reported acreage, the estimated area, as irrigated, for 1890, in districts not reported, and where only partial reports have been made, and without allowing the percentage of increase, as shown for the past two years in the statements filed, and the total area irrigated in the State for 1892 can be safely placed at 2,000,000 acres, showing very creditable progress in the reclamation of our arid lands.

IRRIGATION STATISTICS OF THE STATE

SHOWING THE ACREAGE OF VARIOUS CROPS UNDER IRRIGATION, THE NUMBER AND MILEAGE OF THE DITCHES REPORTED UPON, ETC., FOR 1891 AND 1892.

NAME OF THE DIVISION.	No. of the division.	Number of ditches reported.	Total length as reported.	Average amount of water carried during the season in cubic feet per second of time.	Number of acres that can be irrigated.	Number of acres of alfalfa irrigated.	Number of acres of seeded grasses other than alfalfa irrigated.	Number of acres of natural grasses irrigated.	Number of acres of other crops irrigated.	Number of acres of orchard irrigated.	Number of acres irrigated by seepage.	Number of acres irrigated from reservoirs.	Total number of acres irrigated.
South Platte	1	656	2,651.54	5,103.60	882,853	142,651	39,981	176,450	363,959	—	11,474	28,590	763,105
Arkansas	2	212	664.85	1,232.45	118,696	14,585	2,799	13,469	18,395	—	197	—	49,445
Rio Grande	3	898	1,590.95	8,550.04	635,597	3,790	11,765	212,836	307,428	—	16,825	—	552,644
San Juan	4	45	103.00	147.50	7,354	1,620	303	100	351	—	10	—	2,384
Grand River	5	463	1,414.75	—	130,000	32,437	6,842	12,236	55,701	4,306	30	—	111,552
Green River	6	87	133.55	191.17	16,060	255	329	4,976	3,419	—	55	—	9,034
Totals	—	2,361	6,558.64	—	1,790,470	195,338	62,019	420,667	749,253	4,306	28,591	28,590	1,488,164

The number of districts from which reports were received is as follows: In Division No. 1, from ten; in No. 2, from five, in No. 3, from seven; in No. 4, from one; in No. 5, from eight; and in No. 6, from one.



INDEX.

INDEX.

	PAGE
Title	1
Letter of Transmittal	3

INTRODUCTION.

Remarks on Water Supply, 1891-'92.....	5
Appropriations for State Roads, Bridges, etc.....	6
The numerous duties devolving upon the State Engineer.....	6-7
Adjudications of water rights.....	

CHAPTER I.

Measuring water in ditches.....	9
Instructions to Water Commissioners.....	10
Act of Eighth General Assembly <i>in re.</i> water for domestic purposes.....	10
Collection of Statistics by Water Commissioners.....	10
Water Commissioners, how appointed.....	12
Water Commissioners, concerning changes of.....	12
Water Commissioners, concerning pay of.....	12

TRANSFERS OF WATER RIGHTS.

New Mercer and Yeager Ditches.....	13
Strickler vs. City of Colorado Springs, Supreme Court Decision.....	14
John R. Brown Ditch.....	15
Transfer of Water Rights to City of Fort Collins.....	16

GAUGING STATIONS.

General remarks concerning.....	17
Aggregate amount paid Observers.....	18
Gauging Stations, Nos. 1, 2 and 3.....	19
Gauging Stations, Nos. 4, 5, 5a and 6.....	20
Gauging Stations, Nos. 7, 8 and 9.....	21

TABLES OF DISCHARGES.

Cache la Poudre River, for 1891.....	22
Cache la Poudre River, for 1892.....	23
Arkansas River, for 1891.....	24
Arkansas River, for 1892.....	25
South Platte River, for 1891.....	26
South Platte River, for 1892.....	27
St. Vrain Creek, for 1891.....	28
St. Vrain Creek, for 1892.....	29
North Fork of St. Vrain Creek, for 1892.....	30
Bear Creek, for 1891.....	31
Boulder Creek, for 1891.....	32
Boulder Creek, for 1892.....	33
Big Thompson Creek, for 1891.....	34
Big Thompson Creek, for 1892.....	35
South Boulder Creek, for 1891.....	36
South Boulder Creek, for 1892.....	37
Rio Grande River, for 1891.....	38
Rio Grande River, for 1892.....	39
Comparative Table of Discharges.....	40
Winter Discharges.....	40

COUNTY BOUNDARIES.

Rio Grande, Saguache and Hinsdale Counties.....	41
"Mouth of the Canon of the Snowy Range from whence flows the Rio Grande River".....	41
Report to County Commissioners.....	42
Meeting of State Engineer and County Surveyors at Creede.....	43
Boundaries of Conejos County—Act of 1868.....	43
Boundaries of Saguache County—Act of 1868.....	44
Cochetopa Pass.....	44
Thayer's Map of Colorado.....	45
Rio Grande and Hinsdale Counties—Act of 1874.....	46
Conclusions of Commission.....	48
Monuments.....	49

SEEPAGE WATER.

Measurements on South Platte river.....	51
Measurements on Cache la Poudre.....	52
Table of Measurements for Seepage, South Platte river, for 1891.....	54-57
Table of Measurements for Seepage, South Platte river, for 1892.....	58-60
Table of Measurements for Seepage, Cache la Poudre, for 1891.....	61-62
Table of Measurements for Seepage, Cache la Poudre, for 1892.....	63-64
Comparative Table—Seepage.....	65

CHAPTER II.

IRRIGATION DIVISION NO. 1.

General remarks.....	67
Area irrigated.....	67
Number and mileage of ditches.....	67
Duty of water.....	67
Report of Superintendent of Irrigation.....	68
Report of Water Commissioners, Districts Nos. 1 and 2.....	68
Report of Water Commissioners, Districts Nos. 3, 4, 5, 6 and 7.....	69
Report of Water Commissioners, Districts Nos. 8, 9, 23, 46 and 47.....	70
Report of Water Commissioners, Districts Nos. 64 and 65.....	71
Irrigation by Seepage.....	71
Irrigation by Reservoirs.....	71
Irrigation Statistics of Division No. 1.....	72-73

WATER DISTRICT No. 1—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-2.....	74
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	76

WATER DISTRICT No. 2—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	78
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	79

WATER DISTRICT No. 3—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	80
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	82

WATER DISTRICT No. 4—

Statement concerning Ditches, showing modifications in the Decrees governing appropriations in said District.....	84
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	85
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	86

WATER DISTRICT No. 5—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	87
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	88

WATER DISTRICT No. 6—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	90
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	91

WATER DISTRICT No. 7—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	92
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	93

WATER DISTRICT No. 8—

Statement concerning Ditches, for which decrees have been issued since date of "Fourth Biennial Report".....	95
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	98
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	100

WATER DISTRICT No. 9—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	101
---	-----

WATER DISTRICT No. 23—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	102
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	103

WATER DISTRICT No. 46—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	105
---	-----

WATER DISTRICT No. 47—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	106
---	-----

WATER DISTRICT No. 48—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	107
---	-----

WATER DISTRICT No. 64—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	108
---	-----

WATER DISTRICT No. 65—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92	109
--	-----

CHAPTER III.

IRRIGATION DIVISION NO. 2.

General remarks	110
Area irrigated	111
Report of Superintendent of Irrigation	111
Districts 10, 11, 12, 13, 14, and 15	111
Districts 16, 17, 18, 19, 49, 66 and 67	112
Supply of water in Arkansas River, 1892	112
Injunction vs. Water Commissioners and injury to citizens	112
Recommendation that District Attorneys should represent State	112
Supplemental Report of Superintendent	112
Concerning injunctions	113
Report of Water Commissioner of District No. 10	114
Irrigation Statistics of Division No. 2	115

WATER DISTRICT No. 10—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92	117
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92	119

WATER DISTRICT No. 11—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92	120
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92	122

WATER DISTRICT No. 12—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92	123
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92	125

WATER DISTRICT No. 13—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92	126
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92	127

WATER DISTRICT No. 14—

Statement concerning Decrees to Ditches.....	128
concerning Decrees to Reservoirs.....	132
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	133
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	134

WATER DISTRICT No. 15—

Statement concerning Decrees to Ditches.....	136
concerning Decrees to Reservoirs.....	142
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	143

WATER DISTRICT No. 16—

Statement concerning Decrees to Ditches, in that part of said District lying in Pueblo County.....	144
concerning Decrees to Reservoirs, in that part of said District lying in Pueblo County.....	146
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	147
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	151

WATER DISTRICT No. 17—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	153
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	155

WATER DISTRICT No. 18—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	156
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	157

WATER DISTRICT No. 19—

Report of Water Commissioner.....	158
Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	159

WATER DISTRICT No. 49—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	160
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	162

WATER DISTRICT No. 67—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	163
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	165

CHAPTER IV.

IRRIGATION DIVISION NO. 3.

General remarks.....	166
Districts Nos. 20 and 21.....	166
Districts Nos. 22, 24, 25, 26, 27.....	167
Summary of Reports of Water Commissioners.....	167
Area irrigated.....	168
Report of Superintendent of Irrigation.....	168
Report of Districts 20 and 21.....	169
Report of District 22.....	170
Report of Districts 24, 25 and 26.....	171
Report of Districts 27 and 35.....	172
Recommendations of Superintendent.....	172
Irrigation Statistics of Division No. 3 for 1891.....	174
Irrigation Statistics of Division No. 3 for 1892.....	175

WATER DISTRICT No. 20—

Statement concerning Decrees to Ditches.....	176
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	200
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	201

WATER DISTRICT No. 21—

Statement concerning Decrees to Ditches.....	202
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	208

WATER DISTRICT NO. 22—

Statement concerning Decrees to Ditches.....	209
Decree continued, adjudication of 1890.....	214
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	219
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	220

WATER DISTRICT No. 24—

Statement concerning Decrees to Ditches.....	221
--	-----

WATER DISTRICT No. 25—

Statement concerning Decrees to Ditches.....	223
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	237

WATER DISTRICT No. 26—

Statement concerning Decrees to Ditches.....	239
--	-----

WATER DISTRICT No. 27—

Statement concerning Decrees to Ditches.....	252
--	-----

WATER DISTRICT No. 35—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	256
---	-----

CHAPTER V.

IRRIGATION DIVISION NO 4.

General remarks.....	257
Water Commissioner District No. 34.....	257
Area irrigated.....	257

WATER DISTRICT No. 29—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	258
---	-----

WATER DISTRICT No. 30—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	260
---	-----

WATER DISTRICT No. 31—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	261
---	-----

WATER DISTRICT No. 32—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	262
---	-----

WATER DISTRICT No. 34—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	263
---	-----

CHAPTER VI.

IRRIGATION DIVISION NO. 5.

General Remarks.....	264
Area irrigated.....	264
The Montezuma Valley, its Canals, crops, etc.....	265
Irrigation Statistics for Division No. 5.....	266

WATER DISTRICT No. 28—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	268
---	-----

WATER DISTRICT No. 37—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	271
---	-----

WATER DISTRICT No. 38—

Statement showing modifications in Decrees for Ditches.....	272
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	275

WATER DISTRICT No. 39—

Statement showing the modifications in Decrees for Ditches.....	278
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	280
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	283

WATER DISTRICT No. 40.

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	284
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	287

WATER DISTRICT No. 41—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	289
---	-----

WATER DISTRICT No. 42—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	292
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	296

WATER DISTRICT No. 45—

Statement showing modification of Decrees to Ditches.....	297
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	298
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	300

WATER DISTRICT No. 50—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	301
---	-----

WATER DISTRICT No. 51—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	302
---	-----

WATER DISTRICT No. 52—

Statement concerning Decrees to Ditches.....	30
--	----

WATER DISTRICT No. 53—

Statement concerning Decrees to Ditches.....	306
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	314

WATER DISTRICT No. 59—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	315
---	-----

WATER DISTRICT No. 60—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	317
---	-----

WATER DISTRICT No. 61—

Statement concerning Decrees to Ditches.....	318
concerning "constructive priorities" of Ditches.....	322
concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	324
concerning Reservoirs, relative to which plats and state- ments have been filed, 1891-92.....	325

WATER DISTRICT No. 62—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	326
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	328

WATER DISTRICT No. 63—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	329
---	-----

WATER DISTRICT No. 68—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	330
---	-----

CHAPTER VII.

IRRIGATION DIVISION NO. 6.

General remarks.....	331
Water Commissioner, District No. 43.....	331
Number and mileage of Ditches.....	331

WATER DISTRICT NO. 43—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	332
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	334

WATER DISTRICT NO. 44—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	335
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	337

WATER DISTRICT No 54—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	338
---	-----

WATER DISTRICT No. 57—

Statement concerning Ditches, relative to which plats and statements have been filed, 1891-92.....	339
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	340

WATER DISTRICT No. 58—

Statement concerning Ditches, relative to which plats and statements have been filed 1891-92.....	341
concerning Reservoirs, relative to which plats and statements have been filed, 1891-92.....	345

WEIR MEASUREMENTS.

Professor L. G. Carpenter, Circular No. 13, Colorado Agricultural College.....	345
Tables of Discharge over Weirs.....	346

THE LAW GOVERNING DITCH AND RESERVOIR FILINGS, WITH FORMS
FOR SAME.

Numerous inquiries concerning.....	350
Circular to meet the same.....	350
Form for Ditch or Canal Statement.....	352
Form for Reservoir Statement.....	353
Remarks as to plats.....	355
Expenditures, State Engineer's Office, 1891-92.....	356

CHAPTER VIII.

REPORT ON STATE BRIDGES, ROADS AND RESERVOIRS.

Letter of transmittal.....	359
Bear River Wagon Road	361
Bear River Bridge.....	362
White River Bridge	362
Pitkin County Bridge	363
Routt County Bridge.....	365
De Beque Bridge.....	366
Rio Grande Bridge	368
Berthoud Pass Road.....	369
Grand River Canon Road.....	371
Hinsdale and San Juan County Road.....	373
Montezuma and Dolores County Road.....	374
Douglas County Road.....	376
Clear Creek County Road.....	376
Conejos and Archuleta County Road.....	378
Saguache Reservoir.....	380
Custer County Reservoir.....	383
Apishapa Creek Reservoir.....	385
Chaffee County Reservoir.....	389
Monument Creek Reservoir.....	392
Specifications for.....	393
Summary of appropriations for internal improvements, with unexpended balances, etc.....	398
General remarks on State public works.....	400
Remarks on operation and maintenance of State Reservoirs.....	400
Sale of water from State Reservoirs.....	401
STATE CANAL, No. 1.....	402
Report on progress and cost	404
General summary of irrigated area.....	406
Irrigation Statistics of the State.....	407

